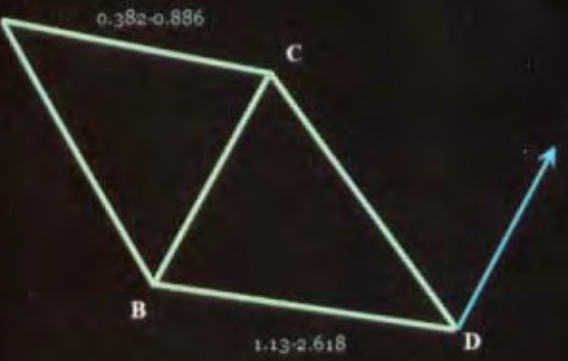
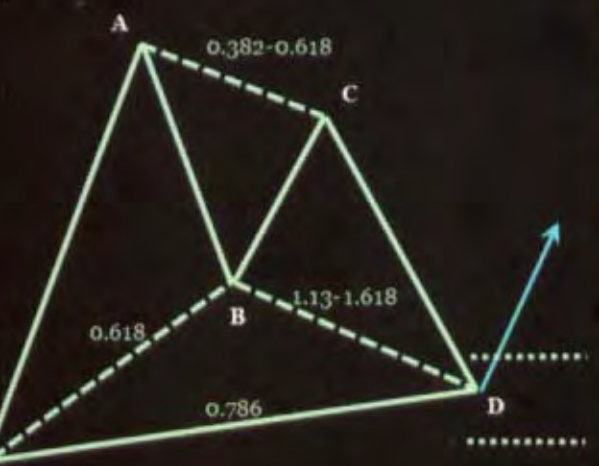


ABCD (Bullish)



Gartley (Bullish)

2B Buy (Bullish)

Trade Chart Patterns Like The Pros

Specific Trading Techniques

SURI DUDDELLA

Reviews for Suri Duddella's
Trade Chart Patterns Like The Pros

"Don't read this book – MAKE MONEY WITH IT! *Trade Chart Patterns Like The Pros* by Suri Duddella is one of those rare opportunities to build a base of knowledge that can take you further each time you trade. Suri has laid out an indispensable tome on trading chart patterns based upon his real-life experiences in a format that will work well for the spectrum of investors – from novice to expert. *Trade Chart Patterns Like The Pros* stays focused and does not overwhelm you with mathematical statistics and technical jargon that will surely turn you off."

"... Suri's "trader-sense" perspective helps you identify a pattern and apply the relevant techniques to enter, manage and exit the trade. Each of his 65 patterns includes a brief synopsis written in plain English and an actual chart to reinforce the concept, not a conveniently drawn perfect example that never occurs in real life. Suri explains the setup and then provides the entry point triggers as well as an exit strategy with targets for profitable trades and stops to minimize any losses."

"...Suri's practical approach will give you insights that will make it harder to lose. Great investing books never sit on the bookshelf – they stay at your side as a trading partner and I can think of no better trader to have at my side than Suri Duddella. *Trade Chart Patterns Like The Pros* is destined to become one of those rare TA books that you spend less time reading and more time using to MAKE MONEY."

--- Michael Steinhardt, HEDGEfolios founder

"..Anyone who has had the privilege of trading alongside him will tell you that Suri's trading skills are second to none. He is consistent and disciplined, but what sets Suri apart is his ability to find and exploit regular market patterns.

This book shares Suri's techniques in detail. For the past two years, I have watched the book develop from a concept into a finished product. The results have exceeded even my high expectations, and I will certainly keep a dog-eared copy within arm's reach of my own trading turret. This book answers the "how" question. It reveals actual techniques that top traders actually can and do use, in a format that lets you use them yourself.

Beginning and experienced traders alike will benefit from this book. Applying these techniques can help the rest of us improve our trading too. "

--- Joshua Silverman

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Trading is risky. You are 100% responsible for your own trading. The author, Suri Duddella, specifically disclaims any and all express and implied warranties. Your trades may entail substantial loss. Nothing in this book should be construed as a recommendation to buy or sell any security or other instrument, or a determination that any trade is suitable for you.

The examples in this book could be considered hypothetical trades. The CFTC warns that:

HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS SUBSEQUENTLY ACHIEVED BY ANY PARTICULAR TRADING PROGRAM. ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS.

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ACKNOWLEDGMENTS

It has been many years since I first thought of writing this book. Sometimes I was discouraged about finding the time necessary to write such a book. Sometimes a clear concept or design for the book was mentally unavailable. With encouragement and support from some of my friends, I finally gained the courage, time, motivation and focus to begin the project. Below are the friends who encouraged me to write this book and who have significantly influenced my ideas and concepts. My sincere thanks to them all. Without their help, this book would not have been possible.

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Mark Booher
Michael Taylor
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FOREWORD by Joshua Silverman

There is a famous basketball court in New York City called Rucker Park. Legend has it that the amateurs who played there were so good, they could take on the pros. There were no shoe contracts or television cameras, but fans sitting on those worn bleachers could see some of the best pure basketball anywhere.

If there were a Rucker Park for trading, Suri Duddella would hold court there. He may not be a regular guest on CNBC or run a billion dollar hedge fund, but anyone who has had the privilege of trading alongside him will tell you that Suri's trading skills are second to none. He is consistent and disciplined, but what sets Suri apart is his ability to find and exploit regular market patterns.

Traders at that level rarely let readers have more than a peek behind the curtain, This book shares Suri's techniques in detail. For the past two years, I have watched the book develop from a concept into a finished product. The results have exceeded even my high expectations, and I will certainly keep a dog-eared copy within arm's reach of my own trading turret.

Plenty of books will tell you what a flag or diamond or Gartley pattern is. Many will tell you whether the patterns are bullish or bearish. But that's where the detail stops. Because most of these books are written by professional authors, not traders, they cannot provide any guidance on exactly *how* to trade these patterns. This book answers the 'how' question. It reveals actual techniques that top traders actually can and do use, in a format that lets you use them yourself.

Beginning and experienced traders alike will benefit from this book. The biggest beneficiary, though, is probably Suri Duddella himself. Writing this book has forced him to define and hone his techniques. I have watched him bring his trading game to the next level. He is too modest to admit it, but even if this book doesn't sell a single copy, it has already been a huge success for him. Applying these techniques can help the rest of us improve our trading too.

Joshua Silverman
Chicago, IL

REVIEW by Michael Steinhardt

Don't read this book – MAKE MONEY WITH IT! There are hundreds of Technical Analysis books and only a handful will ever help you make enough successful trades to recover the purchase price. *Trade Chart Patterns Like The Pros* by Suri Duddella is one of those rare opportunities to build a base of knowledge that can take you further each time you trade.

Like the Chinese proverb that says, "Give a man a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime." Suri has laid out an indispensable tome on trading chart patterns based upon his real-life experiences in a format that will work well for the spectrum of investors – from novice to expert. Unlike the 'encyclopedias' you can find on this unbelievably deep and complex subject, *Trade Chart Patterns Like The Pros* stays focused and does not overwhelm you with mathematical statistics and technical jargon that will surely turn you off.

Instead, Suri's 'trader-sense' perspective helps you identify a pattern and apply the relevant techniques to enter, manage and exit the trade. Each of his 65 patterns includes a brief synopsis written in plain English and an actual chart to reinforce the concept, not a conveniently drawn perfect example that never occurs in real life. This book provides a universal resource for 65 of the most common scenarios that you will run into regardless of your investing time frame (intraday to weeks at a time) and your preferred financial instrument. It's not enough to recognize a pattern; you need to understand the key elements of the trade and how to make it work for 'long' and 'short' positions. Suri explains the setup and then provides the entry point triggers as well as an exit strategy with targets for profitable trades and stops to minimize any losses.

What I can promise you is that Suri's practical approach will give you insights that will make it harder to lose. Great investing books never sit on the bookshelf – they stay at your side as a trading partner and I can think of no better trader to have at my side than Suri Duddella. *Trade Chart Patterns Like The Pros* is destined to become one of those rare TA books that you spend less time reading and more time using to MAKE MONEY.

Michael Steinhardt, HEDGEfolios founder

INTRODUCTION

INTRODUCTION

I have been a mathematician all my life and I am drawn to the application of mathematics in my studies and work. I studied engineering and computers, and eventually found myself involved in the financial markets. The markets offer me a never-ending challenge and the combined application of my true passions--mathematics, logic, computers and money.

When I began focusing on the financial markets in 1995, my first inclination was to study the price movements of the stocks, which in turn led me to study technical analysis. I attended every major market conference and studied many books on the markets. I was fortunate to meet some of the best market 'gurus' and learn the market ropes from them. This was the turning point for me and I decided to pursue trading as my career. Since then—for the past 12 years—I have been studying the financial markets and trading full-time rather successfully. I have made many mistakes—and still do to this day—and I am committed to learn from them. I have had the opportunity to present my trading methods to numerous conferences and have written many articles in various trade magazines. I found my niche to be Pattern Trading.

Many brilliant books have been written on Market Theories, Market Geometry and Pattern Trading. From these books I found what I consider the best strategies, trading techniques and the most reliable chart patterns. Some of the chart pattern techniques have a very high success rate. I have been trading them, and collecting and documenting the results since 1998. I considered writing a detailed reference book for my own trading and in 2005, I began to document these ideas and compile them in a book.

The best part of collecting ideas and writing about these patterns has been that it has significantly improved my own understanding of the inner workings of the markets, and in many ways has greatly improving my own trading techniques. Here is my book, *Trade Chart Patterns Like The Pros.* It provides specific and practical trading techniques and how I trade them. Each pattern is written from the perspective of the trader. Many of the techniques are my own observations and my own trading methods. Not every chart pattern will be suitable for every trader (e.g., counter trend trading, V-bottoms and V-tops may not be for you). In addition, some charts may be too elusive (e.g., diamonds) or too exotic (e.g., sea horse or dragon). Gartley and Butterfly may be too complex.

Regardless of what patterns you are interested in trading, you must master their details before trading them. Patterns must be studied thoroughly in various markets, time-frames and in all conditions. I have spent almost twelve years studying them thoroughly and they still fascinate me. I believe a few patterns are fully reliable and can be traded every time by themselves without the need of support from other indicators or confirming conditions. Other patterns need confirmation and may be less reliable traded independently. Knowing when to trade is a very important aspect of trading education and could be the 'key' to any trader's success. I constantly remind myself that technical analysis is only tool and pattern recognition is only part of the market analysis. Trading success comes from key areas like analysis, trading discipline, execution and money management skills. I will focus on Pattern Analysis and Trading in this book.

WHY THIS BOOK?

There have been many books written on market analysis, technical analysis, trading techniques and various trading methods. Most of these books detail very elaborate concepts, psychology behind the theories, what-if scenarios, statistics and excellent examples. In my view, though, many of these books miss the 'trader perspective' of when and how to trade. Therefore, in this book I will address the trading perspective rather than myriad details of pattern history, random comparisons, unproven or semi-useless statistics, or even some random stories. Most traders are anxious to know what and how to trade, and to know where the entry, the stop or the target is. This book focuses on those points and gives you details of trading every pattern. I have covered about 65 of the most unique, frequent and important patterns that are presented in day-to-day trading. I have provided credits for the original authors of some of those patterns where possible. There may be other patterns which appear frequently which I may have failed to cover. Find some patterns that pique your interest from the 65 patterns presented in this book and master them. You only need one single pattern to be successful.

NO OSCILLATORS OR INDICATORS?

This book is designed to show the patterns independently and provide trading examples of every pattern. Oscillators and momentum-based indicators have not been included. It is important that the reader fully understand just the pattern and its intra-bar relationships, and other indicators may obscure the actual understanding of these patterns. I have studied oscillators and have built excellent strategies to trade with them, but I have had much better success when I rely on solely on patterns. Hence, I have not included any oscillators in this book. I do not mean to say that oscillators and momentum-based indicators do not work—they do work with the right mind-set at the right time. Obviously, I am biased toward chart patterns and truly think they are far more reliable than momentum- or oscillator-based indicators.

WHAT ABOUT STATISTICS?

There are no perfect chart patterns and chart patterns do fail—the key is to know when to trade them and when to avoid them. So, what are the success and failure rates of the patterns? This is very valid question and will be addressed when studying the patterns.

As an engineer and mathematician I understand the power and the importance of statistics very well. To a trader, statistics must be practically useful, but too often they are not. I have seen unproven statistics presentations elsewhere, such as the failure rate waiting for a downside breakout is 32%--but if you don't wait, it is 36%. Or, the average rise is 40%, but most likely it will be 12%. Or, the percentage of high and low price breakouts subject to throwback is 33%. What do these statistics mean to a trader? Having been around the trading world the past 12 years, I know a little bit about what and how traders think. While trading, no trader remembers such statistics and no one trades using such specific statistics. Does the trader's decision change if the throwback rate is 32% instead of 33%? No, he trades what he sees, what he knows and what he has confidence in. His eyes are set on an entry, a stop and targets, and not on some unproven and semi-useless statistics. Hence, I have provided some reliability analysis about a pattern and avoided elaborate statistical analysis in this book.

BOOK STRUCTURE & FORMAT

Perspective

Most concepts in this book are compelled by a 'trading perspective.' After showing how a pattern has developed, the focus is on what to do next.

Format

Each Pattern section is structured to provide: a brief overview, pattern structure description and pattern trading examples with detailed entry, stop and targets.

Type of Charts

Most charts in this book are presented utilizing bar charts for illustration. I have also chosen to use some candlestick charts. All charts were created in TradeStation.

Time-Frames

Most examples are provided with tick, minute and daily charts. I have used stocks and E-mini futures for the examples and pattern descriptions.

Charting Software

TradeStation Securities

Entry Rules

In trending markets, pattern formation confirmations are critical for trading success. In counter-trend trading, there are no clear confirmations other than price trading at some level, divergence, completion of pattern structure, or plain hunch. Most of the reversal patterns need a price confirmation from price reversal zones. An important technique I implement in my trading is to find a reversal bar (the wider the better) and then entering one or two ticks above that bar's high or below the bar's low. I found significant success using this basic technique and use it in examples throughout this book. For example, if I am presenting a 'long' setup in a pattern after a trendline breakout, I initiate a 'long' trade only at 1 or 2 ticks above the breakout bar's high. Similarly, if I am presenting a short setup after a trendline breakdown, I initiate a 'short' trade only at 1 or 2 ticks below the breakdown bar's low. These entries are only valid for the next 3 to 5 bars. Beyond that, the setup may not materialize and should be avoided in most cases.

Stop Rules

Most patterns are traded after clear confirmation signals. The success of Pattern structures is dependent on market conditions. A pattern failure may occur when the pattern setup is not valid due to price-action reversals. For example, a Cup and Handle pattern formed in bear markets may fail more than in bullish markets. Even though I like dollar stops in my short-term trading, there are many times the stops are set at a critical Fibonacci confluence level, or at a major swing high or major swing low, or at some trendline support/resistance levels. Once the price breaches any of these levels, in weaker or stronger markets, the pattern structure will fail. Trading against these levels is really a futile proposition. Sometimes pattern ranges are so large that the risk-to-reward may not be attractive. Hence, stop protection at the half of the pattern range is considered. For harmonic patterns, I implement Fibonacci retracement/expansion ranges for stops.

Target Rules

Managing stops and targets is an art form. Every pattern has its own targets and stops. My trading rule is "never enter a stock just because of some price level (e.g., Fib. level, MA, Support) ***alone***, but always exit because of some important price level to protect your profits." This rule applies very well to targets. I base many of my targets on a portion (Fibonacci ratio) of the prior swing range or multiples of the prior swing range. In channel trading, it is the range of the channel or depth of the patterns, such as in head and shoulders or swing highs/swing lows prior to the pattern formations.

Fibonacci Focus

I employ Fibonacci ratios extensively to show support and resistance levels. I use a specific set of Fibonacci extensions and Fibonacci projections. The primary Fibonacci numbers I focus on are: 0.382, 0.5, 0.618, and 0.786 for the retracements and 1.272 and 1.618 for the extensions. The secondary Fibonacci focus is: 0.236, 0.886, 2.272, and 2.618.

Harmonic relationship Focus

Harmonic price zones occur when there is a convergence of harmonic price ratios/numbers or calculations that occur in a specific area. The trade reversals in these zones have a very high probability and can be traded with confidence. I have used harmonic price zones in the book to focus on certain trade examples.

Major Swing High or Swing Lows

Markets stage major support and resistance zones at key turning points called 'swing highs' and 'swing lows.' A major phase of support is established through a series of lower lows followed by higher highs forming a swing low and a resistance phase is established by higher highs followed by lower lows forming a swing-high. In this book, I focus on taking advantage of these support and resistance zones for either a primary or secondary target. I have used major swing highs or swing lows as protective profit targets. Most traders like to protect their profits at major swing high or swing low as the trade has a high probability of turning or pausing at these levels.

Chapter 1: Chart Types

1.1. Basic Charts

Basic Charts

Technical Analysis is the study of price and trend changes in Commodities, Stocks, Futures and various other market instruments. The price changes are primarily evaluated by various indicators, oscillators or trading systems to give a trader an edge in trading. Technical analysis is not a perfect science by any means, but it does have certain characteristics, patterns or indications which may be repetitive or may be intuitive and tend to possess Zen-like predictability power. Technicians plot these prices and price changes on a chart and apply various indicators and studies to figure out potential supply and demand areas, trade setups, targets and stops to win.

Technicians have developed various methods of representing market data on charts. The most extensively used charts are bar charts, line charts, candlestick charts and point & figure charts. There are many other variations like Kagi, Renko and Range bar charts. In this section, I will attempt to address the basic charts and their usage.

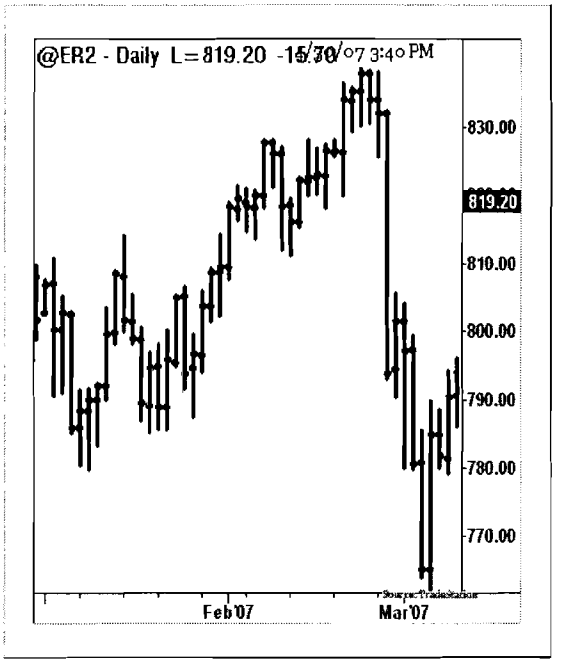
The most basic charts in technical analysis follow simple Cartesian structure (X&Y axes) to draw in 2-Dimensional space. On the X-axis (Horizontal), the time is plotted and on the Y-axis (vertical) the corresponding price is plotted. Any indicators derived from the time and price values, are either overlaid on the chart itself or plotted in secondary-graphs below and above the main price/time chart. Some traders plot volume on the X-axis as a representation of market activity.

Charts are plotted using various scales such as arithmetic or log /semi log charts. Arithmetic charts have the same distance between the prices where as log or semi log charts have a variable distance to represent the proportionate price movements.

There are many facets in technical or chart analysis to understand and master. Price, Volume, and Time are the three most basic components of the market. Many successful traders only study price action to make money. Many other traders use complex mathematical theories and faster computer technologies to analyze and participate in the market action. Nevertheless, regardless of any trading theory or complex mathematical algorithm, the success in the markets lies with individual who can clearly understand the price-action and make the decisions to pull the trigger at the right time with excellent discipline. These individuals possess a higher understanding of market theories, market psychology and dynamics and money management methods and have mastered their execution skills.

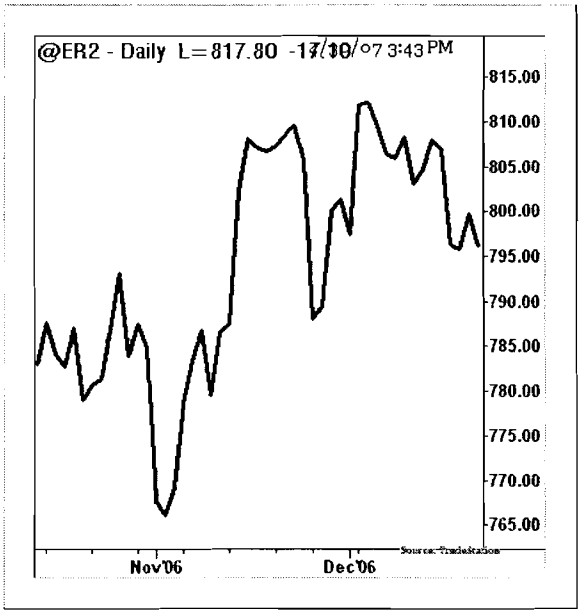
Charts, patterns, indicators and software are only basic market tools. Successful traders view them just as tools and understand the usage. They build a theory and trade with a solid money management plan.

Basic Chart Types



Bar Charts

Bar chart illustration is simple. Within each time-frame, a single vertical bar is plotted representing the price range within that time-frame. Each bar may have a left tick showing an Opening Price and a right tick showing a Closing Price. The top of the bar is the highest price reached within that time-frame and the low of the bar is the lowest price reached within that time-frame. The time-frame can be 1 tick, 1 minute, 1 day, 3-days, 1 week, 1 month or 3-months, or any finite numbers to represent time. The relationship between the Opening Price (left tick) and the Closing Price (right tick) represent the investor's sentiment and the trader's psychology within the trading session.



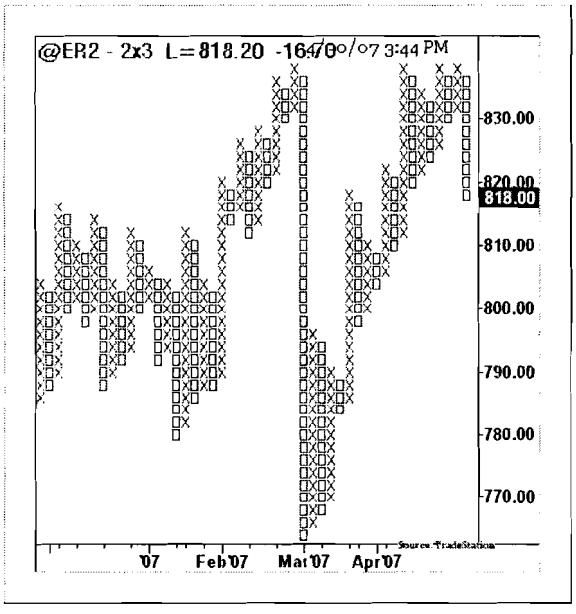
Line Charts

Line charts are based on "closing prices" only charts and have a cleaner look. They do not have open, high and low values plotted and potentially eliminate the noise and truly represent the value of the current price and true investor sentiment. Line charts can be plotted for highs, lows and open or pivot prices, but are only plotted for a single value object series in the entire chart. Line charts are usually plotted when there is a comparison between two market instruments such as spread charts, comparison charts and relative strength charts. Also, line charts are useful for small illustrations and trend displays. Most indicators are plotted using line charts, namely RSI and Stochastics.

Basic Chart Types

Candlestick Charts

Candlestick charts were devised by Japanese rice traders in the 1600s and are discussed in detail in the next chapter. Candlestick charts are built on the open to close price relationships. The real-body is represented by the range between open to close and the color of the candle is black if the price closed below the opening price and white if the price closed above the opening price. The "wicks" on the both ends of candlestick represent the trading sentiment before settlement. Candlesticks have various patterns and truly represent supply and demand. Traders use candlestick charts with other market indicators such as moving averages, trend lines and RSI etc., to find the better opportunities than western charting methods such as bar and line charts.



Point and Figure Charts

The Point & Figure (P&F) charting technique is one of the oldest methods where the chart represents a true change (a box size) in price. In P&F charts, the time passage on the X-axis is ignored as the chart records the price change. P&F Charts have Xs and Os representing ascent and descent of a fixed box size price change. Each box size is pre-set and the price is represented only if the price trades above or below the previous box by that amount. The P&F method visually displays clear support and resistance levels. Trades are initiated from these levels on breakouts and breakdowns. Charts do not move in congestion range, hence choppy trading can be avoided. Box sizes can be a function of price range, average true range or a fixed size based on the closing prices.

1.2. Candlestick Charts

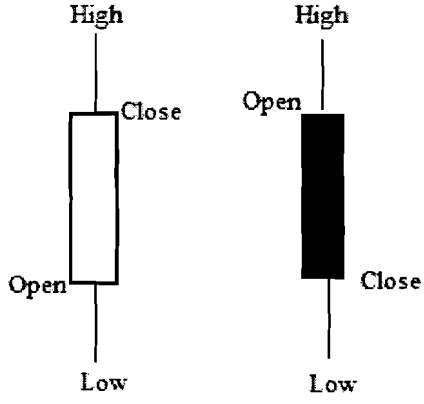
Candlestick Charts

Japanese rice traders invented Candlestick charting methods in the 1600's. "Candlesticks" show a visual representation of traders' emotions; where as "bar" charts or "western" charts emphasize a focused approach on closing prices. Candlestick charts have a real-body (Open to Close) and shadows (Upper, Lower) showing intra-bar price relations between the key price values. In Candlestick charts, if a price closes higher than the open price then the Candlestick would be plotted Green suggesting bullish, and if the price closes lower than the open, the Candlestick would be Red, suggesting a bearish condition. The market sentiment is measured by the "real-body" length and its color. The bigger the real-body the bigger the sentiment and the smaller the real-body the smaller the sentiment which conveys indecision.

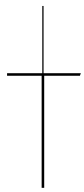
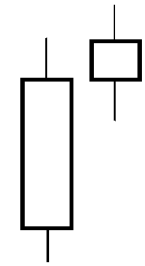
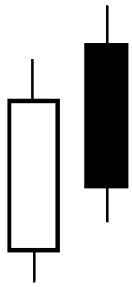
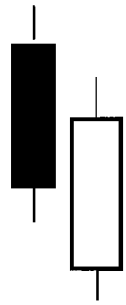
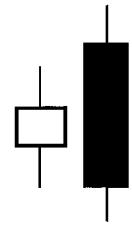
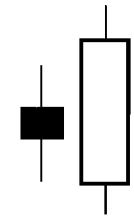
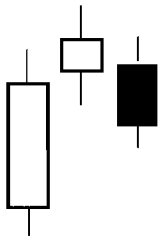
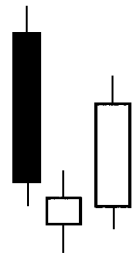
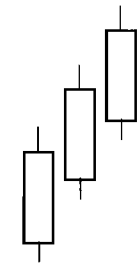
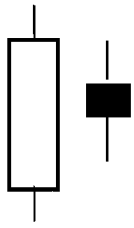
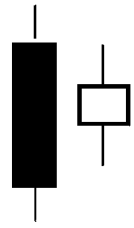
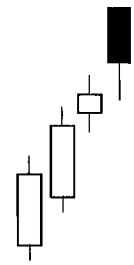
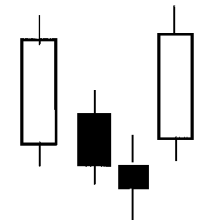
Candlestick charts offer a unique advantage over bar charts or line charts since they offer an excellent visual representation of the relationships with prior Candlestick bars. This indicates supply and demand along with the support and resistance levels, and possible trade decision opportunities for trend continuation or reversals.

Candlestick charts offer a simple way to show market movements and present outstanding trading opportunities. There are about 30-40 Candlestick patterns, continuation and reversals, which are helpful in trading. However, these patterns need to be clearly understood and mastered for successful trading purposes. The theory behind Candlestick charting method is not infallible. All patterns have clear confirmation theories and trading rules. The charts demand a full understanding of knowledge of pattern formations for successful trading.

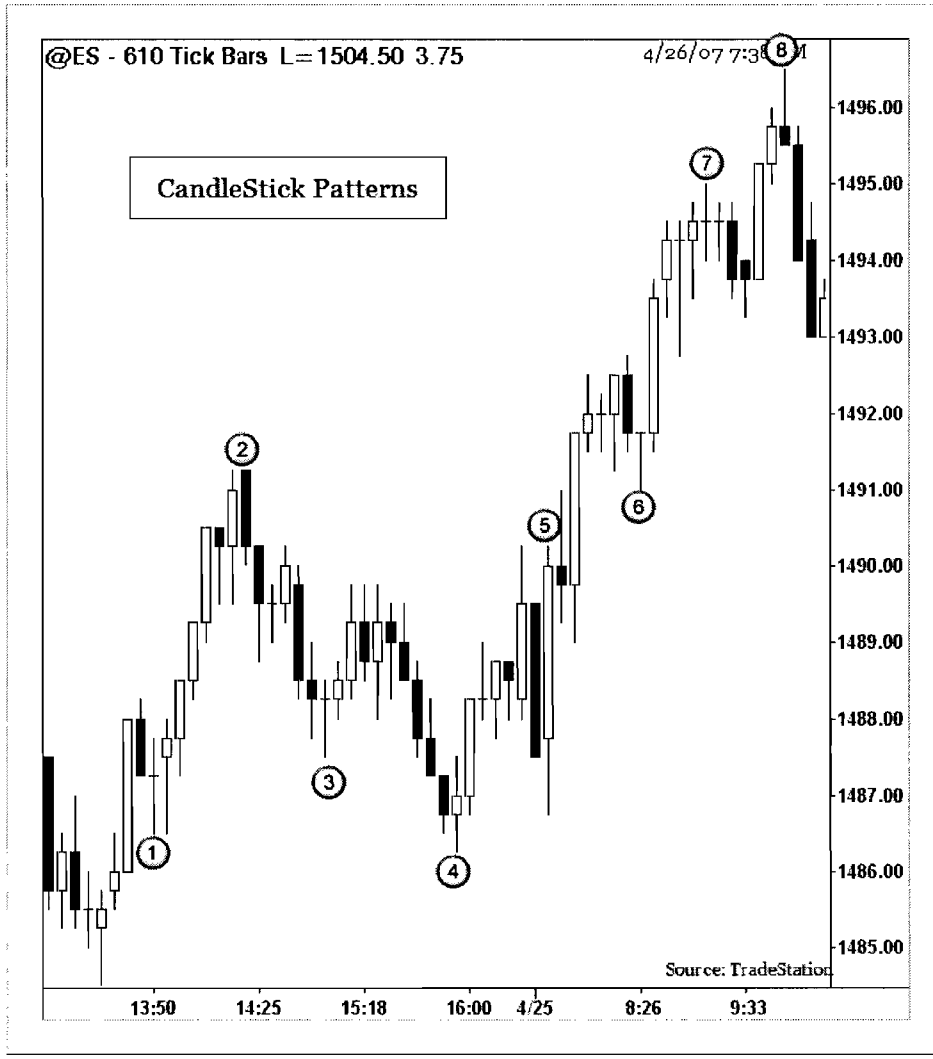
There are many books written on Candlestick patterns and theories. Below are a few examples of trading Candlestick patterns.



Candlestick Patterns

 Doji	Inverted Hammer	Hanging Man	 Spinning Top
 Dark Cloud	 Piercing Lines	 Bearish Engulfing	 Bullish Engulfing
 Evening Star	 Morning Star	Three Black Crows	 Three White Soldiers
 Bearish Harami	 Bullish Harami	 Belt Hold	 Ladder Bottom

Trading Candlestick Charts



Trading Candlestick Patterns

The chart above illustrates various Candlestick patterns from the S&P 500 Futures 610 tick chart. Various Candlestick patterns have been marked in the chart above and explained as follows: 1). A Doji pattern to suggest indecision in the prior direction. 2). A Dark Cloud to signal a potential end of trend. (Also see Hammer pattern prior to the Dark Cloud). 3). Another Doji to signal indecision. 4). A Piercing line followed by a strong trend reversal bar. 5). A Bullish Engulfing pattern to confirm a strong trend ahead. 6). A Gravestone Doji. 7). A Doji bar to suggest an imminent trend reversal in the next few bars. 8). An inverted Hammer at the top to signal the end of uptrend and strong downtrend to follow.

1.3. Three Line Price Break Charts (3LPB)

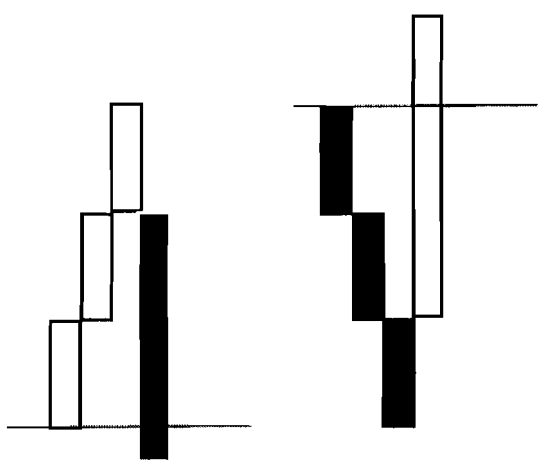
3LPB Charts

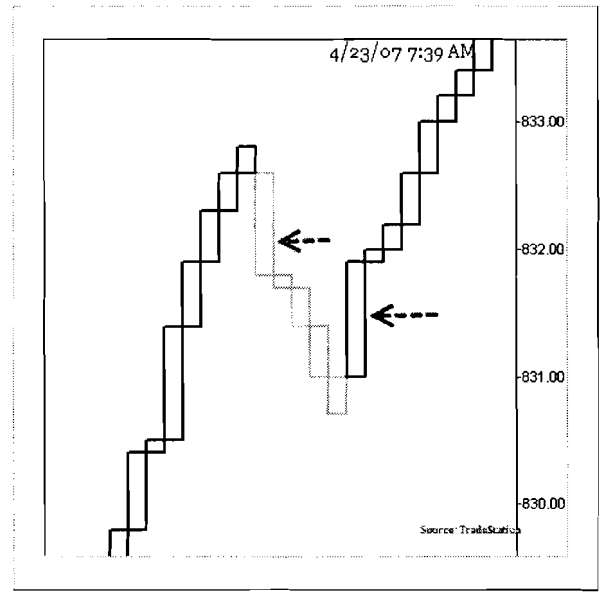
Three Line Price Break (3LPB) charts define the underlying trend and are considered as an adjunct to the candlestick charts. 3LPB charts display a series of vertical boxes or candles that are based on price changes. The 3LPB method entirely dispenses with the recording of the volume sales and time data on the X-Axis. The other major charting techniques like Point & Figure, Kagi and Renko charts also ignore the passage of time and volume.

The 3LPB are always constructed based on closing prices. A basic understanding of 3LPB is when there are three white successive candles, the major trend is up, and when there are three successive black candles, the major trend is down. The major reversal signals (based on the 3LPB technique) are given when the shift lines, white to black or black to white are formed. After forming a confirmed trend of 3 white candles or 3 black candles, the reversal is only triggered if the current price is traded below the lowest of all prior three candles in case of a bullish trend reversal, or if the current price is traded above the highest of all prior three candles in case of the bearish reversal.

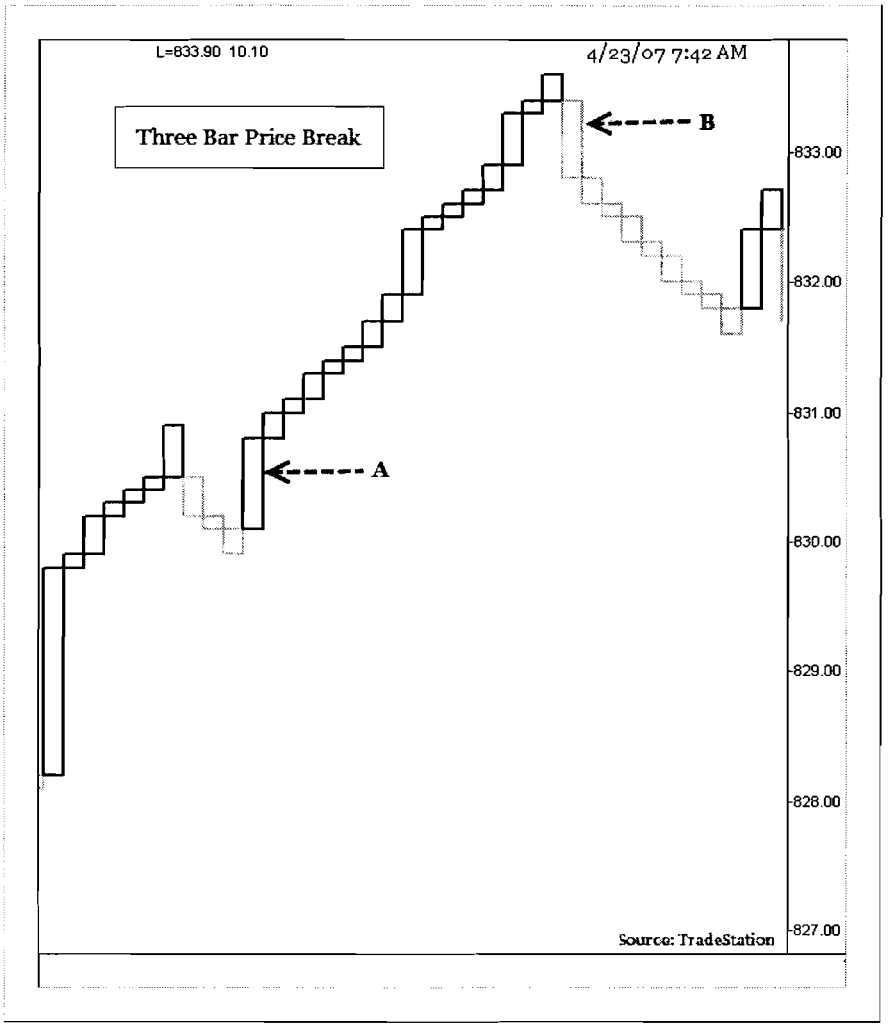
Trading with 3LPB

The 3LPB charts below show major trend changes. A trend change confirmation is made when a reversal bar is formed. However, a trend confirmation bar could be late and a significant move to the upside or downside may have already happened. A solution for this problem could be an intra-day trading signal for confirmation of the trend. The 3LPB charts also use other indicators and pattern formations to indicate price trends. The best trade signals are generated when the market reverses near the key support and resistance levels.





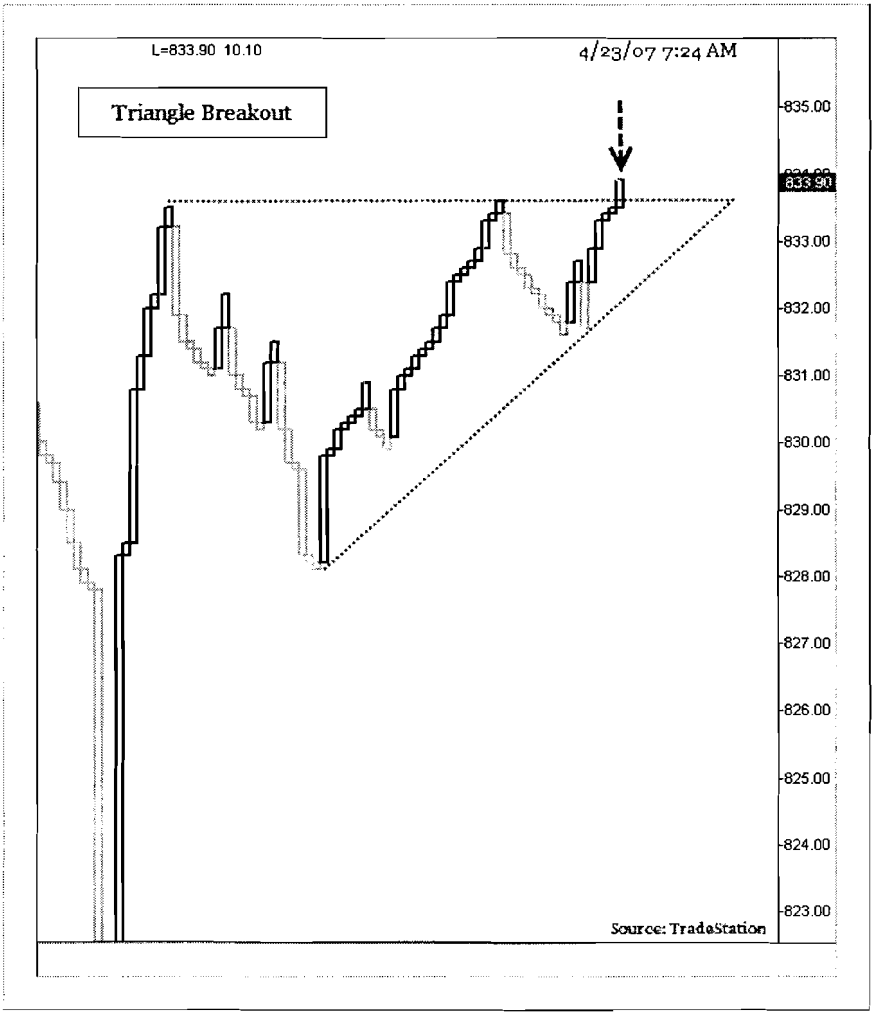
Trading 3LPB Pattern



Trading 3LPB Charts

The chart above shows an example of a 3LPB pattern from the Russell 2000 E-Mini one-minute chart. Candle A shows a Three Line Price Break reversal to the upside from the previous trend as the price closed above the high of the three candles. A "long" entry is placed at 831 level. A stop order is placed at the low of this breakout candle at 830. Targets are either taken with a reversal candle or at a pre-set target limit. One of the best techniques to place a target is to take the length of the reversal bar and use 2 times the length of the bar as the target. At candle B, a 3-Bar reversal candle is formed to enter a "short" position below the low of candle B. A "stop" order is placed above the high of Candle B. A target of twice the length of the candle is placed below the entry level.

Trading 3LPB Pattern



Trading 3LPB with Triangle Formation

The chart above shows a Three Line Price Break chart from the Russell Emini one-minute chart. The chart shows an ascending triangle pattern formation as the upper trend line was tested three times. The price closing outside the upper trend line signals a potential long trade.

1. Enter a "long" trade above the high of the breakout bar.
2. Place a "stop" order below the low of the breakout candle.
3. In an "Ascending triangle" pattern trade setup, the depth of the triangle is added to the breakout level for a target.

Chapter 2: Bar Groups

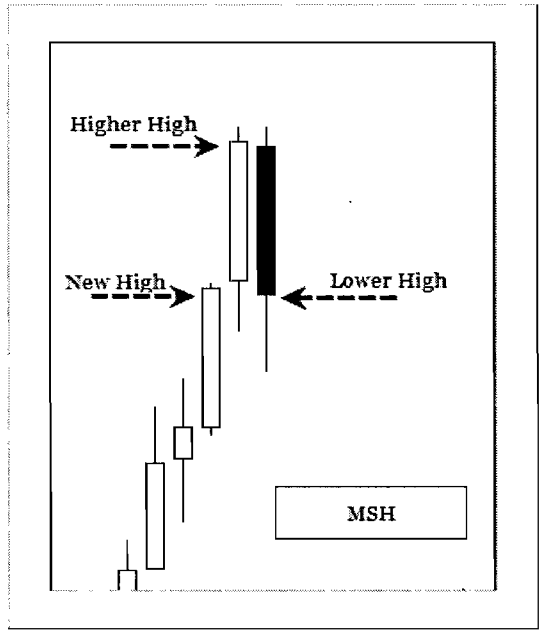
2.1. Market Structures

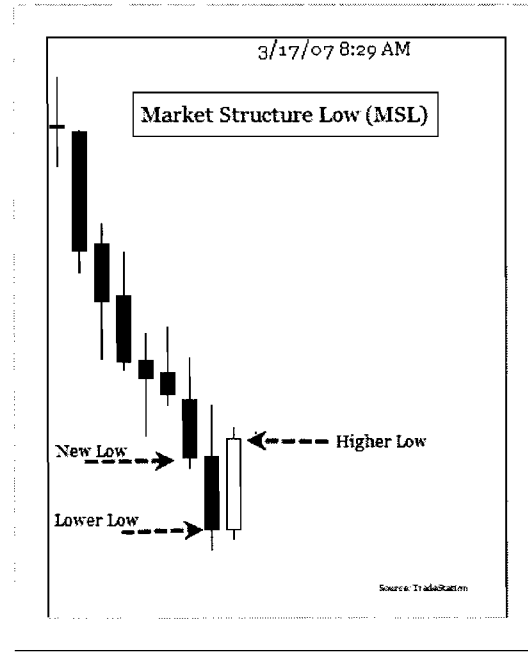
Market Structures

I first read about the Market Structures concept from Dr. Ron Lockhart. Then I read more detailed Market Structures work from Michael Jardine's book, *Fibonacci Trading*. The Market Structure concept is simple, yet a very powerful structuring concept. Markets have structures and traders miss most cues as they are constantly hunting some pattern, momentum, oscillator or some Zen-type signals. Market Structure formation is a price phenomenon occurring at major turns. Prices start with a wave (lets say Up) and it ends at some point and then there is a down-wave, and it ends some time and then begins another up-wave. These wave formations start with the Market Structures. Market Structure Low (MSL) and Market Structure High (MSH) formation is continuous and is repetitive at every wave begin and at every wave end.

Market Structures form in all markets, in all time-frames and in all instruments. They fail and re-fail, form and re-form. Market Structure is a concept pattern. It needs other indicators, support/resistance levels, triggers to confirm the theory and its works.

Market Structures are well explained with Candlestick charts. Market Structure Low (MSL) is explained with three candle pattern. A new low, lower low, higher low of **CLOSE**. Please see the word in **BOLD**, MSL is based on close values *not* lows or highs. A MSL based long is triggered when prices close above the highest close value. A stop is being placed below the low of the MSL to protect the trade.





Market Structure High (MSH)

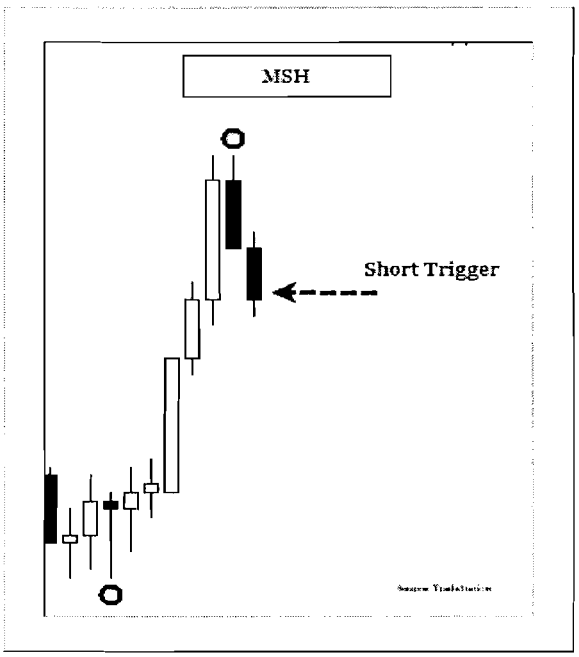
A Market Structure High (MSH) is formed when markets are making major tops. They form near key resistance areas or key moving average levels, which is very significant. There are many theories of using MSHs in trading. One theory of MSH, is to find a critical resistance area and trade a short position. The other way is to find a series of past MSHs and build a trend line for resistance. The third way is to use MSH in a fractal wave form and build a larger wave structure using the distances between them.

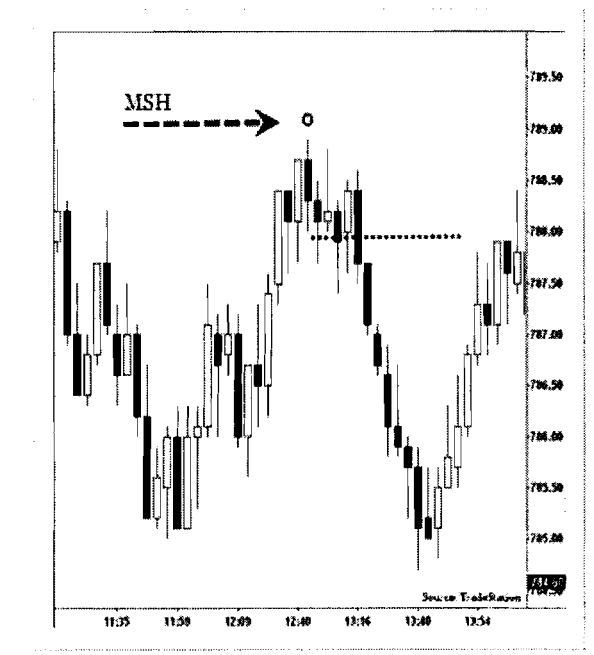
The Market Structure High (MSH) definition is when markets make a new high followed by higher high followed by lower high. This pattern is shown with a three candle pattern. But many cases it may not be. It can form in 5-6 candles in a time-frame, but the internal candles should be mostly inside-bars suggesting indecision.

Trade:
A MSH short trigger (after 3-bar MSH formation) is signaled when price closes below the low of the third candle.

Stop:
Place a "stop" order above the MSH pattern's high.

Target:
There are two ways to target MSH shorts. One is to trade until another MSL forms near a key significant level. The second method is to trade with a trailing stop using the previous bar's high as the stop.





Trading MSH

Trading Market Structure High (MSH)

The example above illustrates a Market Structure High (MSH) formation from the ER2 610 tick chart. On March 14, 2007, at around 9.35am, ER2 formed a Market Structure High to signal a potential top at 780 level. A short trading opportunity is presented when prices closed below the low of the third candle.

1. Enter a "short" trade below the low of the third candle at 778.
2. Place a "stop" order above the MSH high at 780.2.
3. Target is dynamically changed and traded until the prices form either another MSL, or if the price closes above the previous bar's high after an initial profit.

Trading MSL

Trading Market Structure Low (MSL)

The example above shows a MSL formation from the Dow EMini futures (YM). In October, 2005, YM made a MSL formation after a long downtrend around 10700 level. This MSL is confirmed when the price closed above the high of the third candle.

1. Enter a "long" trade above the high of MSL at 10850.
2. Place a "stop" order one-tick below the low of the MSL at 10650.
3. Target a reversal MSH formation or when price closes below the low of previous bar.

Trading Market Structures

Trading Market Structures

The example above illustrates a Market Structure trading formation on Russell Emini futures (ER2) weekly chart. In April 2002, ER2 formed a Market Structure high at 560 level. A short trading signal was triggered the following week at 540 level. A stop is placed above the high of MSH at 565. A profit level for MSH trading is set either at a previous swing low or MSL level, or until another MSL is formed to reverse its trend direction. A similar trading opportunity for MSH is presented again in December 2002. A MSL trading opportunity is shown in April 2003 around 420 levels. A stop loss is set at MSL low (at 390).

2.2. Three Bar Groups

Three Bar Groups

Chart formations in Technical analysis require a group of bars to derive a pattern. Sometimes a single bar or two bars can show great patterns, but as a group, 3-bar series groups provide reliable patterns or confirmations for other major developing patterns. These groups of bars are called "key reversal" bars. This 3-bar group may also consist of well known two-bar reversals or a single bar patterns within inside this group. Most of these 3-bar groups are part of a "fractal" formations or part of "market structures" where a prevailing trend showing signs of pausing or reversal of current trends. Bars with exhaustion price-action, "narrow range (with inside-days)" or "spike with ledges" are some of the 3-bar group pattern examples. 3-bar group pattern formations near key support and resistance levels or near key moving averages (50 EMA, 200 SMA) offer great potential trade setups.

Within the 3-Bar Groups, intra-bar relations like close and open values relative to other bar close and open values and how they are formed could give signals of continuation or reversal of trends. Gaps within the 3-bar patterns also have significance.

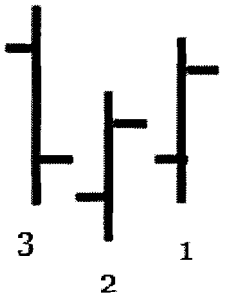
Three Bar Pattern groups as the name suggests, will have three continuous bars. It can be in any time-frame or in any market instrument. A 3-bar group pattern is defined using the three bar's inter-bar Open, High, Low, Close relationships with each other. In my view, Three Bar patterns are relatively short trade setups and should be traded using other indicators. They are more effective as reversals near the end of prolonged trends than in the middle of the trends. When markets making new highs and showing a series of signs of pausing or reversals, 3-bar patterns are more reliable than 3-bars formed in the middle of the trend. Two out of three 3-Bar Groups may be successful but the concept also applies to bigger structures with three continuous major "swing highs" and three continuous major "swing lows". When trading three-bar groups, look for the third bars' range. When the range of the third bar is greater than prior two bars, it tends to produce more reliable results.

One of the 3-Bar Groups (Market Structures) is discussed in detail in this book and here I present few of my favorite patterns that I trade.

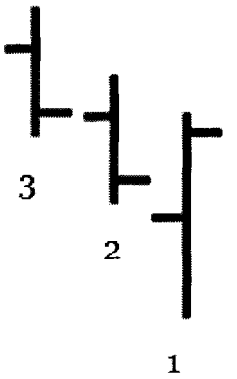
Trading 3-Bar Groups

All the 3-Bar group patterns listed below have trade-setups. Most of these patterns are short-term based and targets are usually at a major "swing high" or major "swing low" based on the pattern setup. Stop orders should be placed to protect the trade within the 3-bar groups. Three bar group patterns fail when significant support or resistance is traded against the trade setup. When trading an upside 3-bar group, place a stop order below the lowest low of the three bars. When trading a downside 3-bar group, place a stop order above the highest high of the three bars.

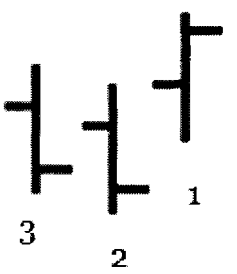
Trading Three Bar Groups



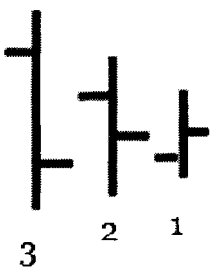
H[3] > H[2]
C[2] < C[1]
L[1] > L[2]
H[1] > H[2]
Trade above H[3]



H[3] > H[2]
C[2] < C[1]
L[2] < L[3]
O[1] < C[2]
C[1] > C[2]
L[1] < L[2]
Trade above H[2]

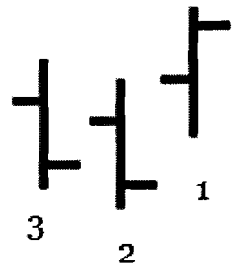


H[3] > H[2]
C[2] < C[3]
O[1] > C[2]
H[1] > H[3]
Trade above H[1]

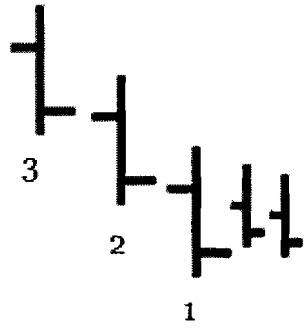


H[3] > H[2]
H[2] > H[1]
L[3] < L[2]
L[2] < L[1]
Trade above H[3]
or Trade below L[3]

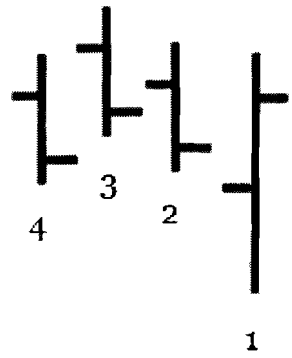
Trading Three Bar Groups



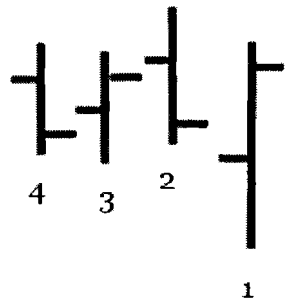
H[3] > H[2]
C[2] < C[3]
O[1] > C[2]
H[1] > H[3]
Trade above H[1]



L[2] < L[3]
L[1] < L[2]
H[3] > H[2]
H[2] > H[1]
Series of Small bars
Trade below L[1]



H[4] < H[3]
C[3] > C[2]
C[2] < C[3]
O[1] < C[2]
C[1] > C[2]
Trade above H[3]



H[3] < H[4]
C[3] > C[4]
H[2] > H[3]
C[2] < C[3]
L[1] < L[3]
C[1] > C[3]
Trade above H[2]

2.3. Matching Highs/Lows

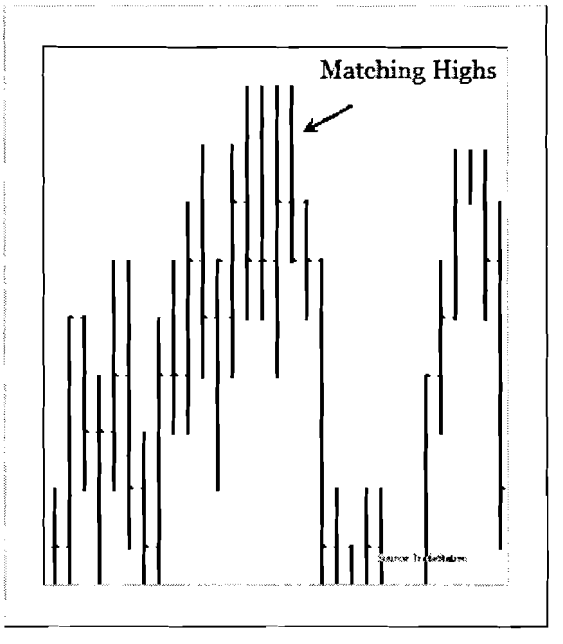
Matching Highs/Lows Pattern

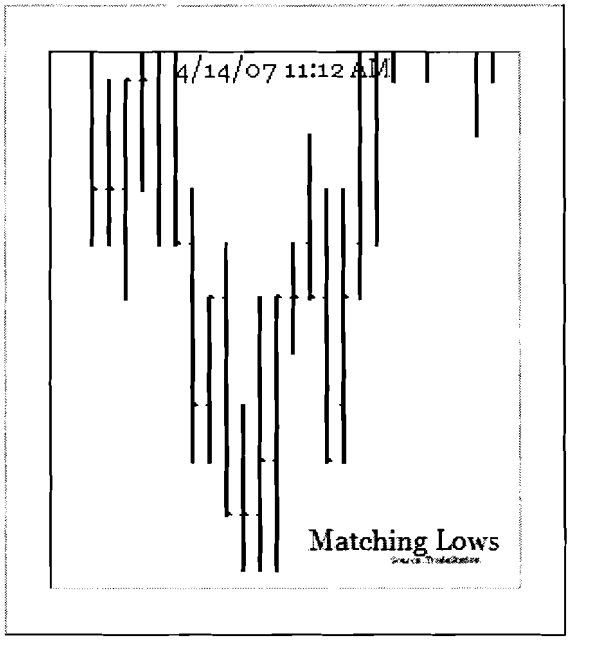
Matching Highs and Matching Lows patterns occur at market bottoms and tops. Prices form key support and resistance areas at certain price ranges, and attempt to break these levels for at least 3 bars in a row. When the prices fail to break these levels, they form "matching lows" and matching high patterns for a minimum of 3 bars, and these "matching highs" or "matching lows" may signal a potential trend reversals. These patterns are more effective in daily and weekly charts. Intra-day tick charts with higher tick counts or time-frames are used when finding reliable matching high/low patterns.

Trade:
Trades are taken in the opposite direction prior to the matching highs/lows pattern. After a "matching lows" pattern, a "long" trade may be entered above the high of the breakout bar. For a matching highs pattern, a "short" trade is entered below the low of the breakdown bar.

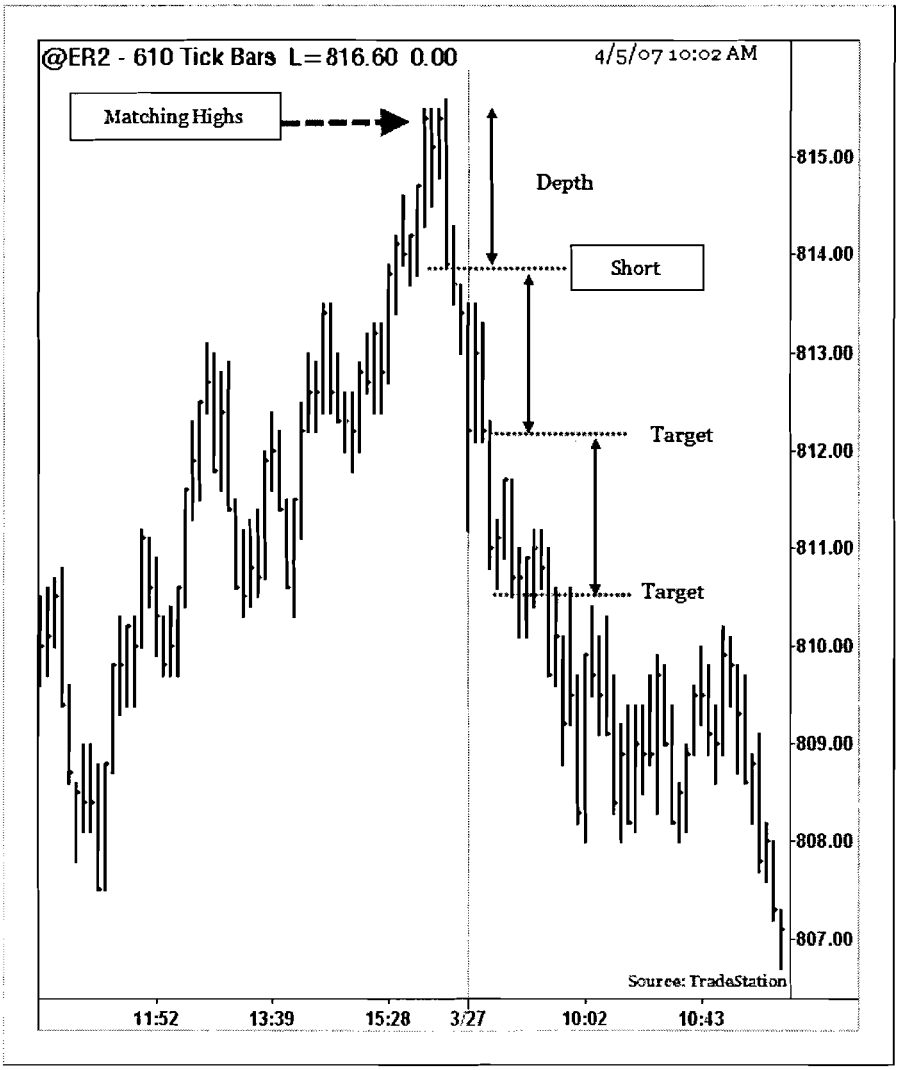
Stop:
Place a "stop" order below the low of the pattern for a "matching lows" pattern. For a matching highs pattern, place a "stop" order above the high of the pattern.

Target:
Targets are placed from the trade entry in multiples of length of the breakout bar. For a long entry, place the first target at the length of the breakout bar above the entry, and the second target is set at twice the length of the breakout bar above the entry. For short entry, place the first target at length of the breakout bar below the entry level, and the second target is set at twice the length of breakout bar below the entry.





Trading Matching Highs Pattern

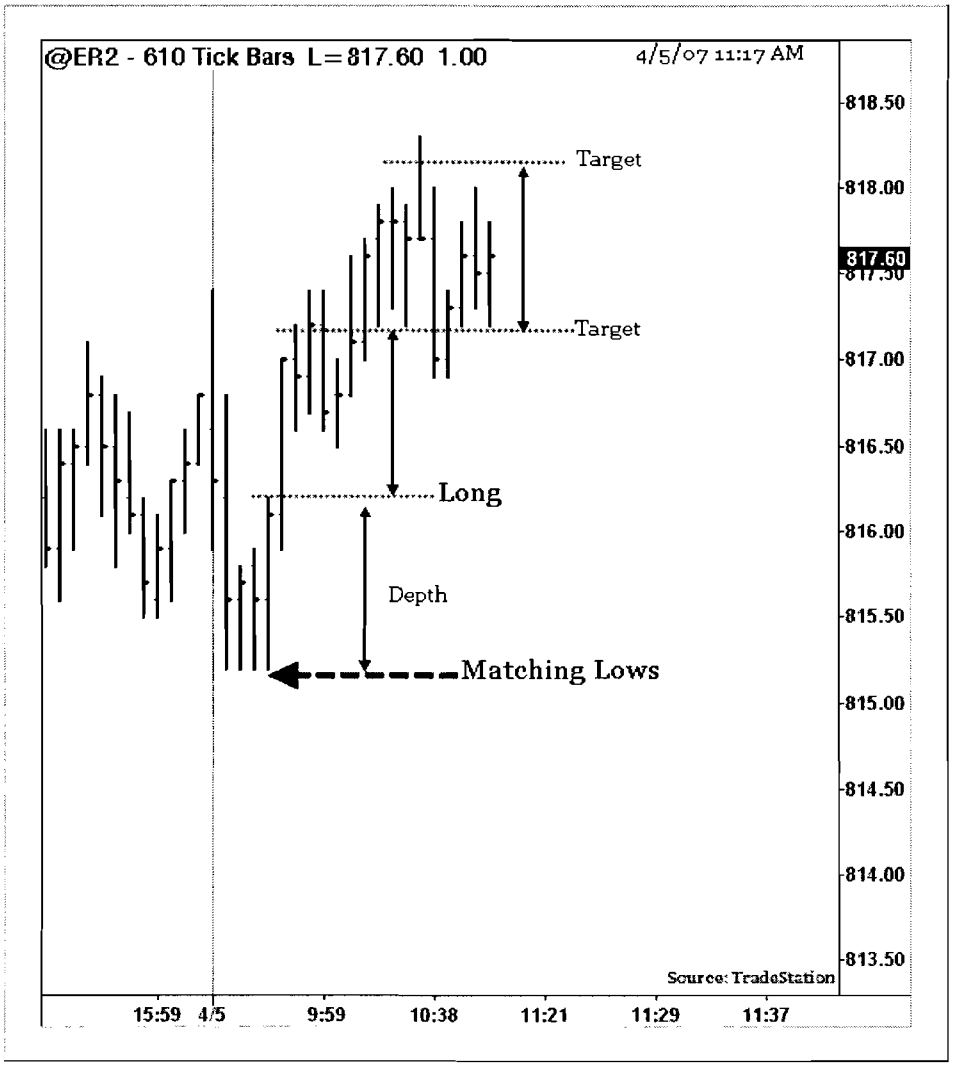


Trading Matching Highs Pattern

The example above illustrates a "Matching Highs" pattern from the Russell Emini futures (ER2) 610 tick chart. On March 26, 2007, ER2 rallied most of the day to form a top at the 815.5 area. Late in the afternoon, Russell formed a Matching Highs pattern for a series of bars to suggest a potential short trade.

1. Enter a "short" trade below the low of the breakdown bar at 813.6.
2. The length of the breakdown bar is measured at 1.6 points.
3. Set a profit target at 812 (length of the breakdown bar) and 810.4.
4. Place a "stop" order above the high of the pattern at 815.5.

Trading Matching Lows Pattern



Trading Matching Lows Pattern

The chart above illustrates an example of a Matching Lows pattern from the Russell Emini futures (ER2) 610 tick chart. On April 5, 2007, during the morning trading, ER2 formed a matching lows pattern at 815 area to suggest a potential long trade. Wait for a breakout bar to confirm higher highs before placing a trade.

1. Enter a "long" trade one-tick above the breakout bar's high at 816.3.
2. The length of the breakout bar is 0.8 points.
3. Set targets at 817.1 (length of the bar) and 818.
4. Place a "stop" order below the low of the matching low pattern at 815.1.

2.4. n-Bar Rallies/Declines

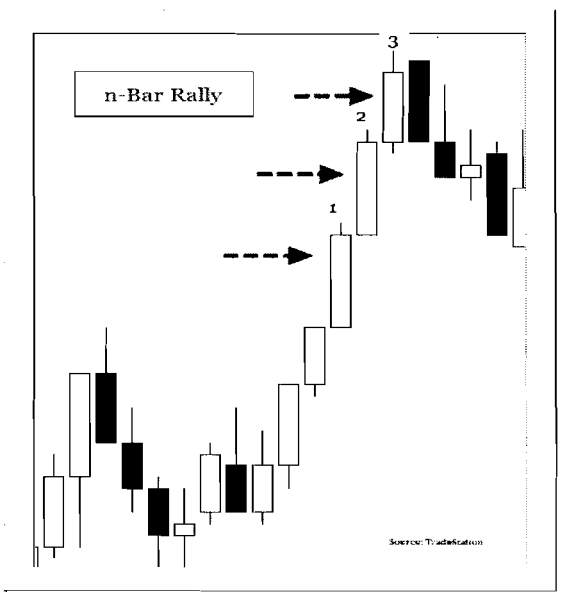
n-Bar Rallies/Declines

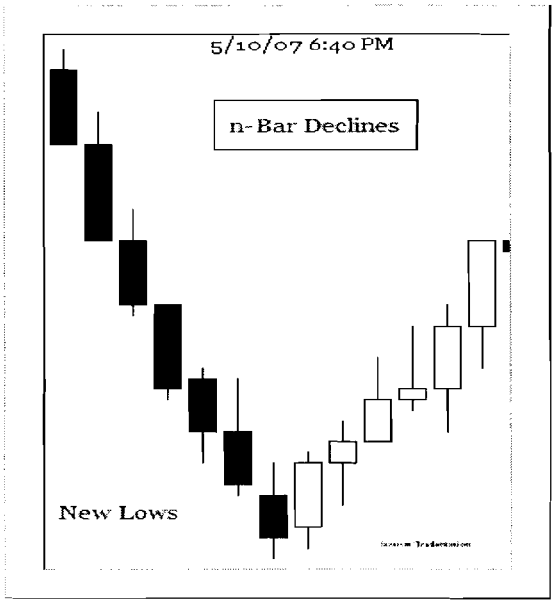
Stocks making new Highs and new Lows with high volume attract momentum players. Momentum players continue to push these stocks until the supply or demand diminishes. But as in any rally or decline, these trends stop and reverse. The prices become oversold and overbought creating a condition for exhaustion of the supply and demand. Hence, if these prices reverse (could be brief), an opportunity is presented. Traders who wait and take advantage of these counter-trades are daring and risky, but they do present a healthy risk/reward profit ratio. The popular trading strategy is to wait for the trend to stop and reverse. The n-Bar Rally/Decline setup presents a technique of trading these counter-trend setups.

Trade: The n-Bar Rallies/Declines build up on based on new-highs and new-lows setups. Prices must make at least a 21-bar new high and new-low, and at least 3 new highs or 3 new lows successively-the higher the number, the better the pattern result. After an exhaustion move, enter a long one tick or 5 cents above the last falling bar's high, or enter a short one tick below the last rising bar's low.

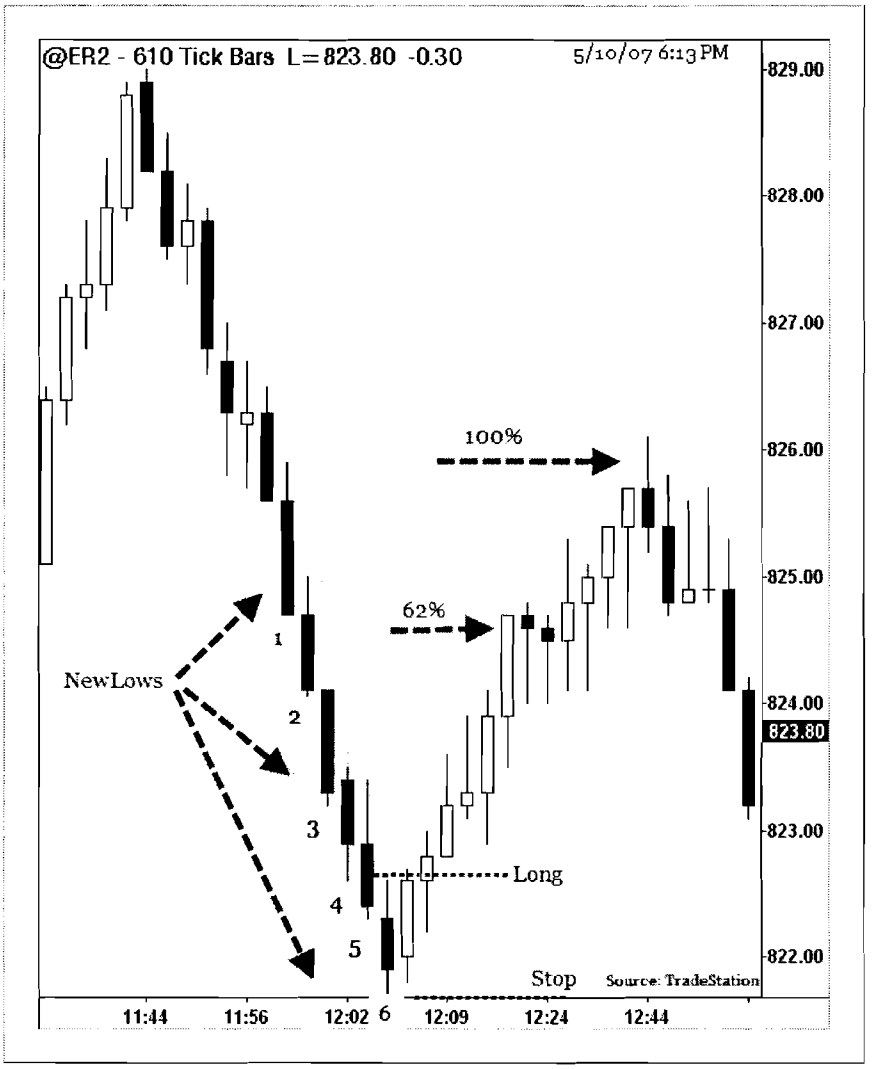
Stop: Place a "stop" order one tick below the low of the falling bar in a long setup, or place a "stop" order one tick above the high of the rising bar in a short setup.

Target: Place a target 62% to 100% of the entire range of n-bar Rally/Declines for long or short setups. The other targets could be a major "swing high" or major "swing low" prior to the n-Bar setup.





Trading n-Bar Rallies/Declines

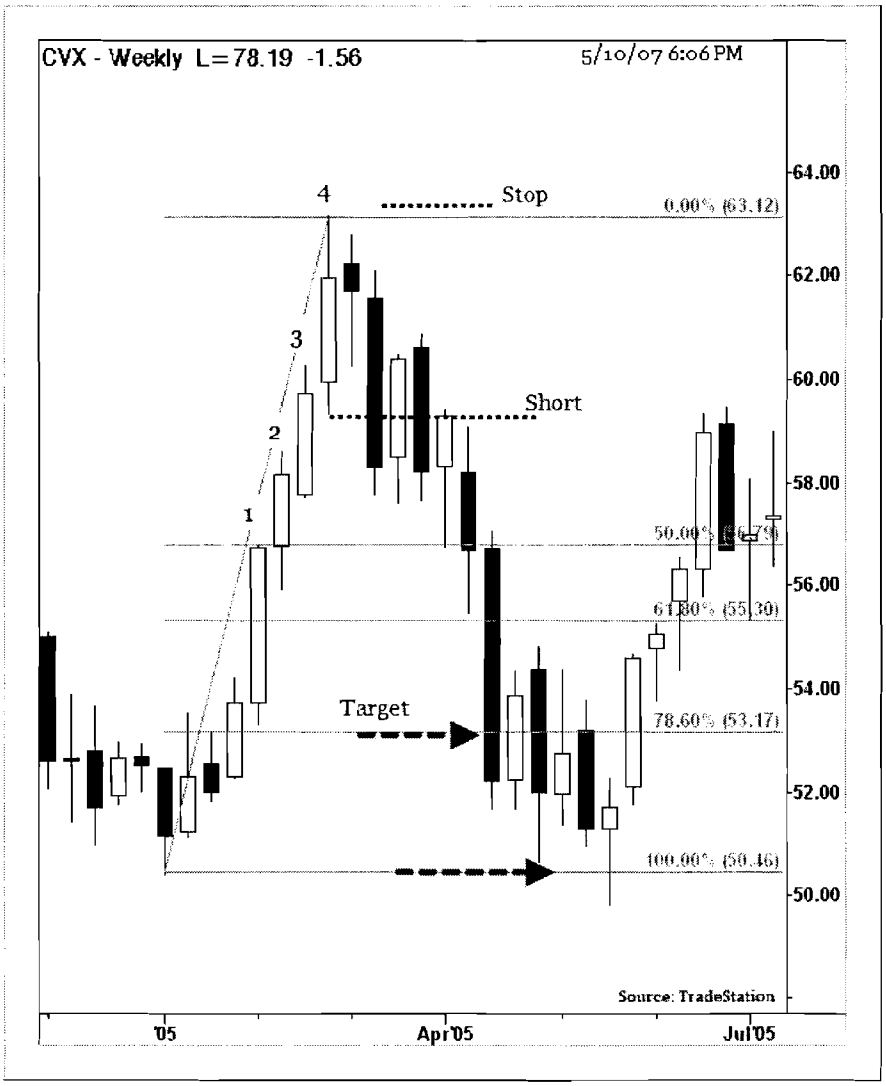


Trading n-Bar Declines

The example above illustrates an n-Bar Decline pattern from the Russell 2000 Emini chart. On May 10, 2007, ER2 sold off in the pre-afternoon session and started to make new lows around 12pm. Six new lows bars were traded before a reversal bar triggered a trad above the previous bar's high. This scenario presented a trade long in the downtrend.

1. Enter a "long" trade one tick above the previous bar's high at 822.7.
2. Place a "stop" order below the low of the n-Bar decline at 821.6.
3. Target between 62% and 100% of the n-Bar decline range from 824.8 to 826.

Trading n-Bar Rallies/Declines



Trading n-Bar Rally

The example above illustrates an n-Bar Rally setup from the Chevron weekly chart. From January to March of 2005, Chevron's stock rose from $52 to $63. Chevron made a series of higher-high prices to complete n-Bar High pattern. At the beginning of April, 2005, Chevron stopped making new highs and presented a potential short setup.

1. Enter a "short" trade below the low of the last higher-high bar at $59.70.
2. Place a "stop" order above the high of the last n-Bar setup at $63.25.
3. Place the target from 62% to 100% of range of the n-Bar setup from $55 to $53.

2.5.
Seven-Day Narrow Range & Inside Bar & Opening Range Breakout (NR7ID with ORB)

NR7ID with ORB

Toby Crabel popularized a trading pattern called NR7ID with ORB in his book, *Day Trading with Short Term Price Patterns and Opening Range Breakout.*

7-Day Narrow Range (NR7): NR7 is defined as the daily range which is narrower than the prior 6-Day range.

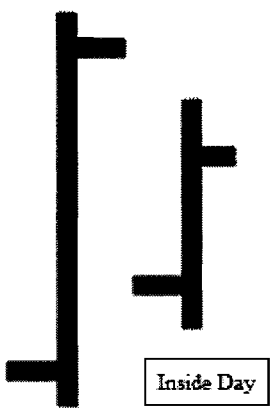
Inside Day (ID): Inside Day is defined as a trading day that has range which is completely encompassed by the previous days' range. The prior day's high is higher than the current days' high and the prior day's low is lower than current days low.

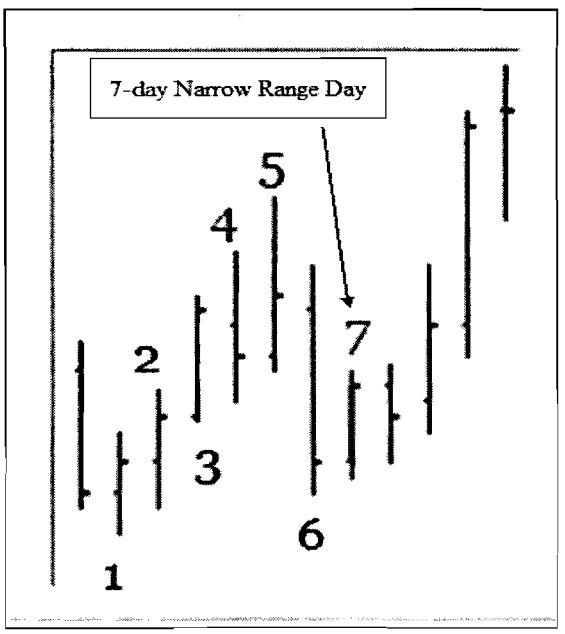
Opening Range Breakout (ORB): Is a trade executed when prices trade a predetermined amount above or below the opening range. The predetermined range is calculated as the 10-bar average distance between open to high and open to low.

Trade: Enter a trade after the NR7ID in the direction of the breakout. Enter a long trade on breakout at the ORB value above the high. For a short trade, enter a short trade on breakdown at the ORB value below the Low.

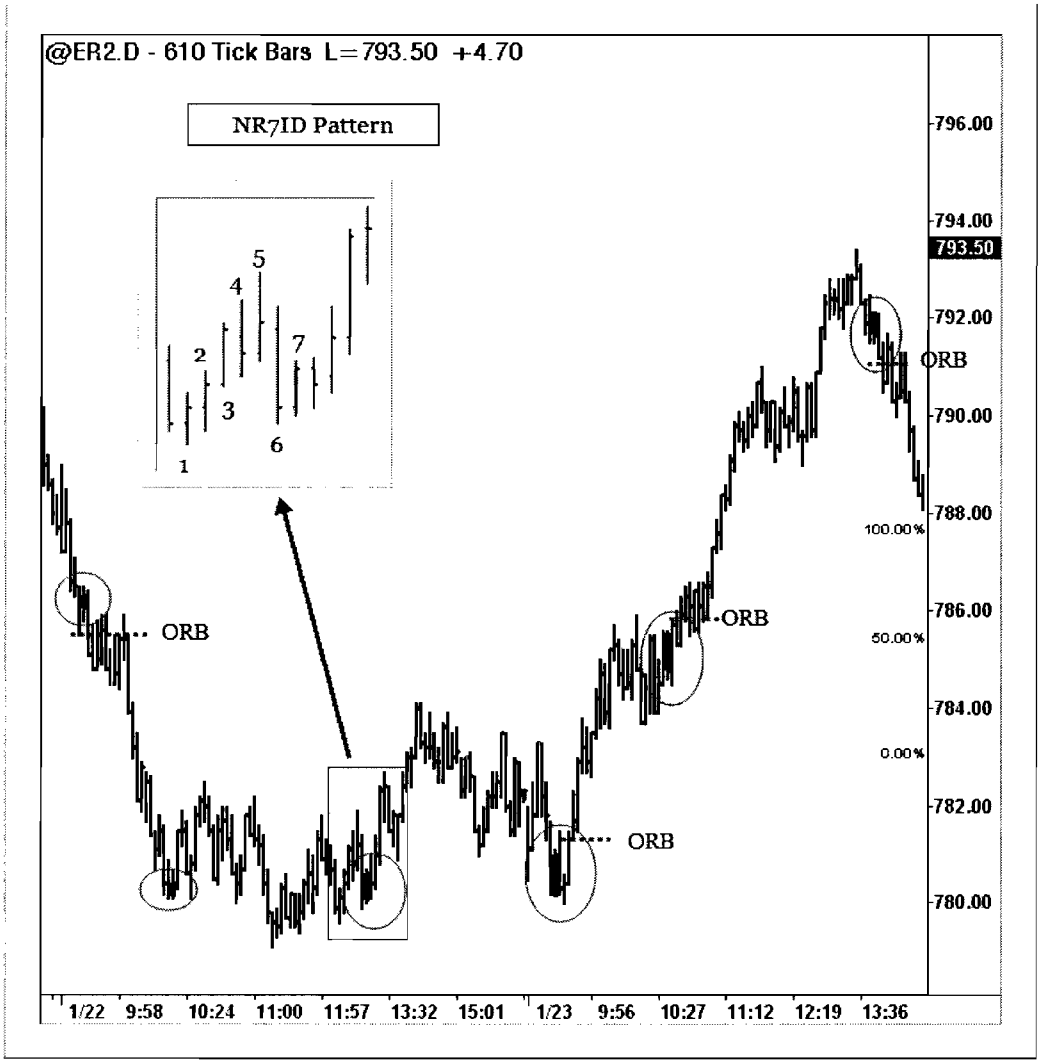
Stop: For breakout trades, place a stop order at (low-ORB). For breakdown trades, place a stop order at (high + ORB).

Target: "NR7ID with ORB" is primarily a trade entry technique and the targets are set at prior "swing highs" and prior "swing lows" or at key resistance and support areas.





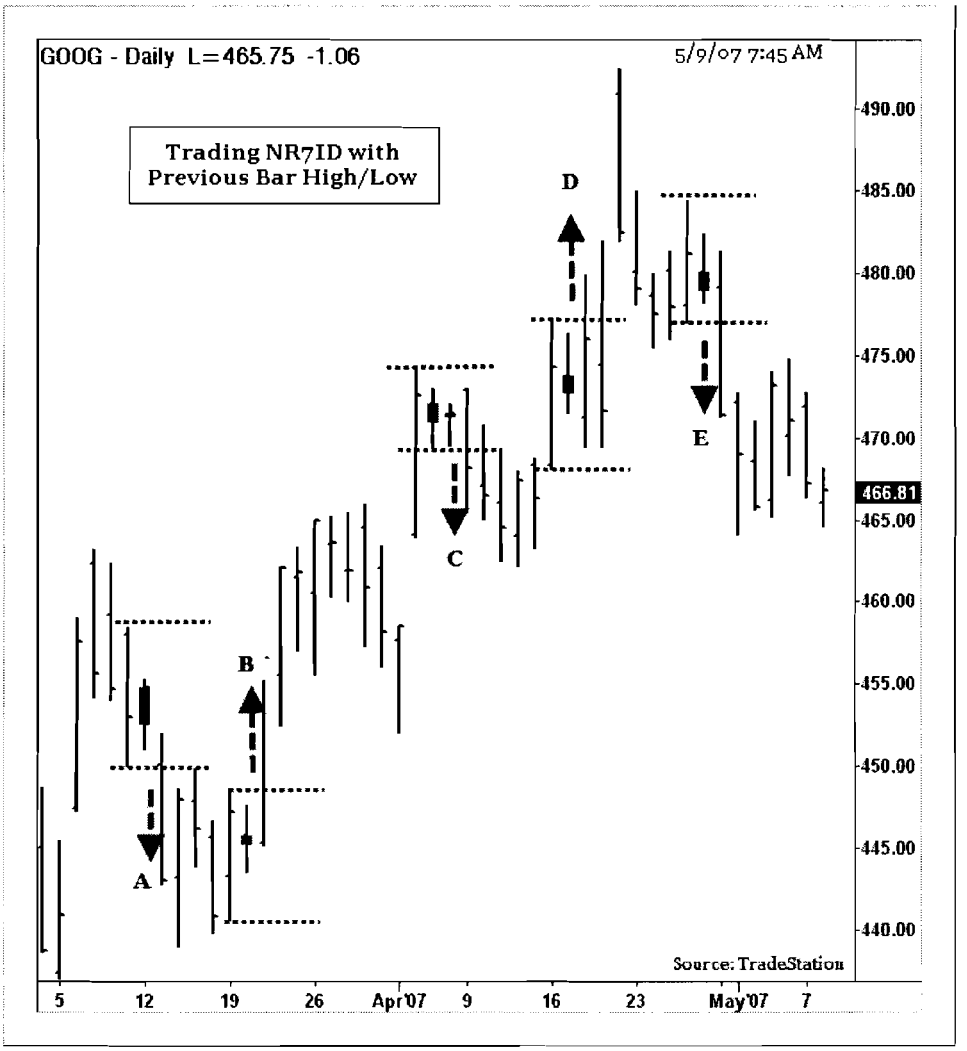
Trading NR7ID with ORB



Trading NR7ID with ORB Pattern

The chart above illustrates a series of NR7ID patterns (shown in circles) from the Russell 2000 (ER2) 610 tick chart. An ORB is computed for a trade entry on the charts. Trades are only initiated in the direction of the breakdown or breakout above the high by ORB (at high + ORB), or below the low by ORB at (low – ORB). A stop order is placed in the opposite direction of the trade. As an example, for a breakout from NR7ID, a stop is placed at (low-ORB) and for a short trade, a stop is placed at (high + ORB).

Trading NR7ID



Day Trading NR7ID with Previous bar High/Lows

The chart above illustrates an example of a NR7ID pattern with previous bar highs/low trading from the GOOG daily chart. An efficient way to trade NR7ID bars is to use the previous bar high, or the previous bar low as the trigger points. Trade stops are placed on the other end of NR7ID against the trade. Usually these trades are very short-term and should be closed within 1-3 bars (days). In the chart above, on March 12th, GOOG formed a NR7ID pattern at A. A trade setup is to enter a long trade on the next day if the price trades 10 cents above the previous days high or enter a short if the price trades 10 cents below the previous days' low. Trades at B and D are long trades. Trades at C and E are short trades.

2.6.
Seven Day Wide-Range and Outside Day Pattern (WR7OD)

WR7OD Pattern

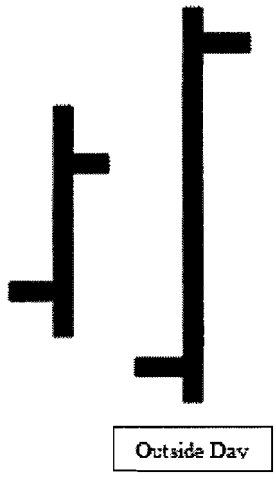
A 7-day Wide Range bar is formed when a current bar has the widest range in the last 7 bars. An outside bar develops when the low of the current bar is lower than the previous bar and the current high is higher than the previous bar. Trades are only entered in the direction of the current trend.

Wide Range bars forming at the start of a trend or at key reversal levels could signal strong bullish and bearish trends. If Wide-Range bars are forming out of a consolidation range, they signal price continuation in the direction of breakouts. And Wide-Range bars forming at the end of the rallies and sell-offs, the bars may be signaling exhaustion and potential trend reversals.

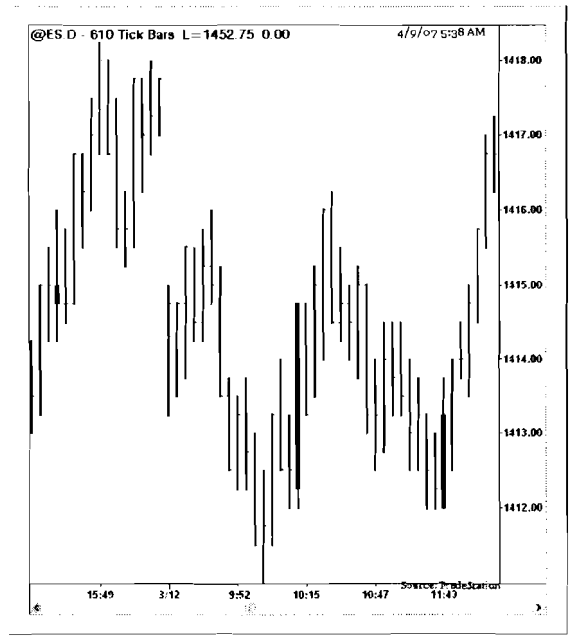
Trade: Wait for WR7OD to form in the current up or down trend. In an uptrend, trade only "long" one tick above the high of the WR7OD bar. In down trends, trade only "short" one tick below the low of the WR7OD bar.

Stop: Place a "stop" order one-tick below the low of the WR7OD bar (for breakouts). Place a "stop" order one-tick above the high of the WR7OD bar (for breakdowns).

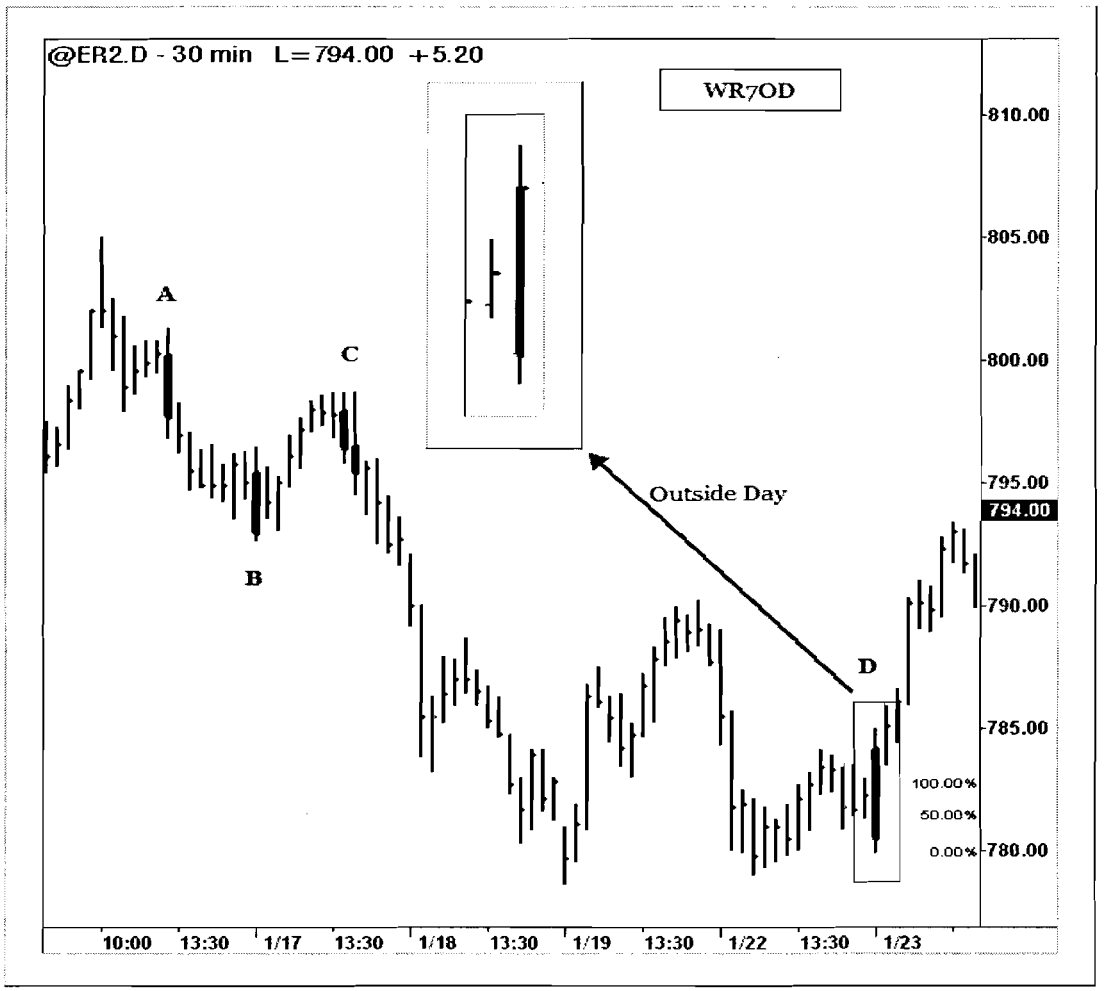
Target:
Set targets of 50% to 100% of the WR7OD range from the breakout or breakdowns levels.



Outside Day



Trading WR7OD Pattern



Trading WR7OD Pattern

The example above illustrates a WR7OD pattern from the Russell Emini (ER2) 30 minute chart. Please note the Wide Range bar inset. Wide Range bars are only traded in the breakout direction of the trends. A 7-day Wide Range bar signals trend shift. Long trades are initiated high above the Wide Range bar. In the example above, bars A, B and C are in down-trend and trades are only taken from downside. Bar D is formed in uptrend and trade is only taken in the upside direction.

1. Enter a "long" trade one-tick above the high of the WR7OD bar.
2. Place a "stop" order one-tick below the low of the WR7OD bar.
3. Place targets from 50% to 100% of the WR7OD range from the breakout level.

Trading WR7OD Pattern

Trading WR7OD Pattern

The example above shows a 7-day Wide-Range with outside bar formations from the S&P futures 610 tick chart. WR7OD bars signal the exhaustion and trend reversals. Trading WR7OD coupled with any confirmation indicators, or other market patterns, could be profitable. The first WR7OD bar was formed around lunch time in an uptrend. A "long" trade can be entered above the high of the WR7OD bar at (1). The second WR7OD bar is formed at around 1:30 pm in downtrend. A downside trade is triggered below the low of the Bar 2. The third WR7OD bar is a trend reversal bar and trade is triggered above the high of the WR7OD bar. The fourth WR7OD bar is a continuation bar similar to the third WR7OD bar.

Chapter 3: Pivots

3.1. Floor Pivots

Floor Pivots

Traders believe the market direction can be divulged by Floor Pivot levels. They buy or sell these pivot levels and exit at either the first or second resistance levels. They also have the option to sell the pivot level and cover at the first or second support levels. Floor pivot trading is an effective way to find support and resistance levels, and is widely used by many traders. Prices around pivot levels signal choppy or trend market modes. In bullish markets, when prices consolidate around the pivot levels, prices tend to pick the prior trend direction and trade higher. Pivot trading is very crucial and most traders utilize daily Pivots for trading. However, weekly and monthly Pivots are equally important. Some traders compute the mid points between the Pivot and support or resistance levels and plot them on their charts.

A confluence of pivots increases the chance of potential support/resistance compared to a single pivot level. Often there will be many confluences between daily and weekly pivots on a chart and these levels could be significant for traders.

It is almost rare to see price reaching beyond R3, R4 or S3 and S4 levels on regular daily trading. Also, it may be rare to see prices outside of weekly S2 and R2 levels. Some traders use weekly extreme levels and short weekly "R2" level and cover at the weekly Pivot or buy the weekly "S2" level and sell at weekly Pivot levels.

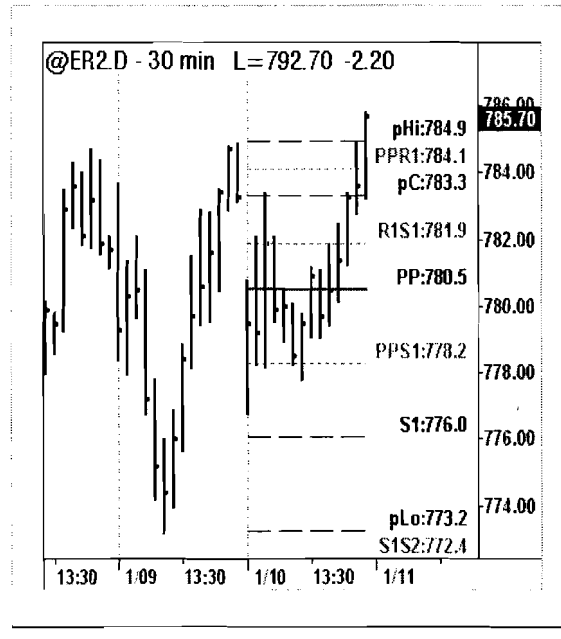
Pivots are very efficient for both day and swing trading. Pivot trading is quite profitable using these support/resistance levels in the direction of the trend along with good money management techniques.

Floor Pivot Calculations

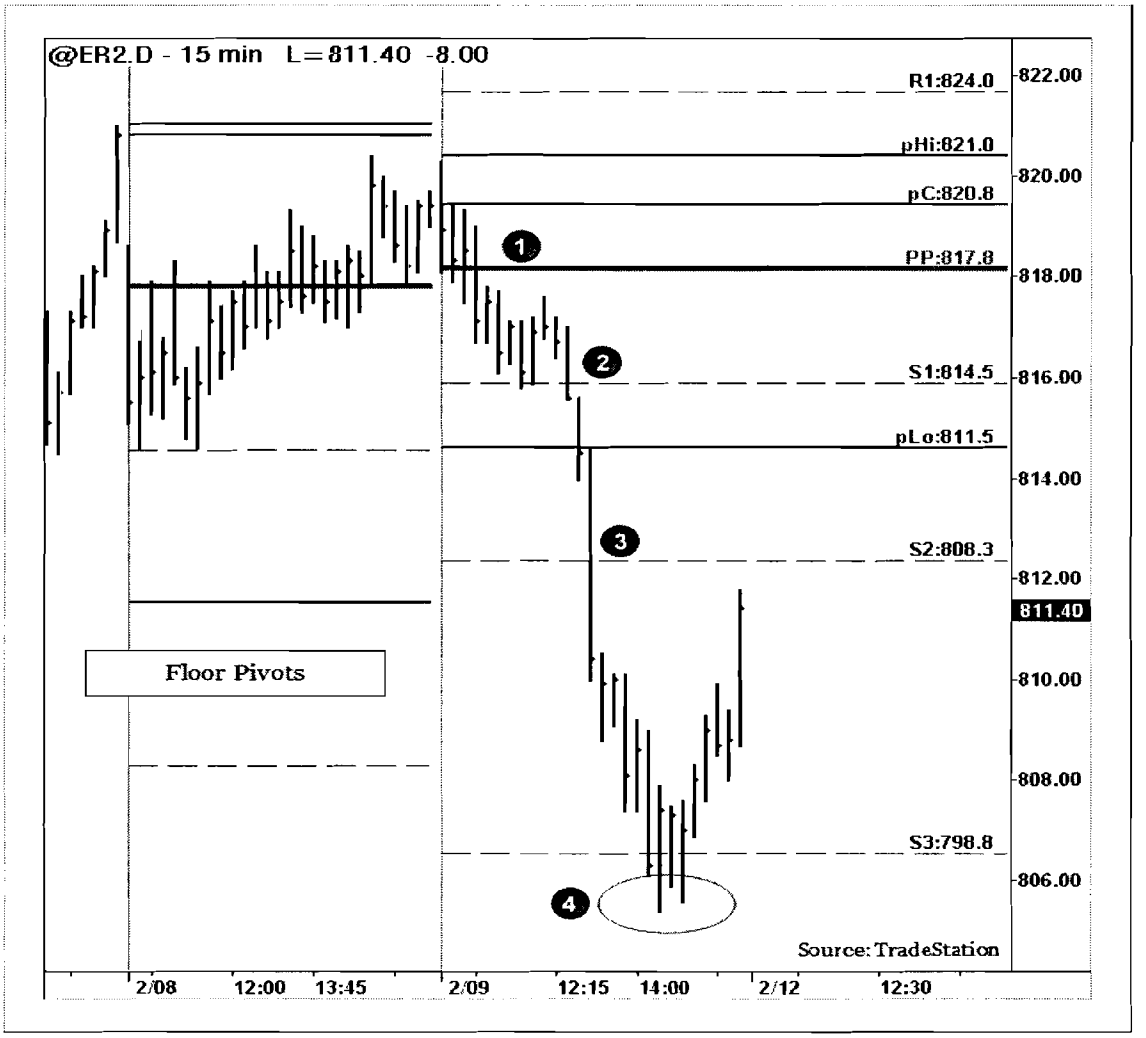
Pivot Point (PP) = (H+L+C)/3
First resistance (R1) = 2*PP –L
First Support (S1) = 2*PP - H
Second Resistance (R2) = PP + (R1-S1)
Second Support (S2) = PP – (R1-S1)
Third Resistance (R3) = R1 + (H – L)
Third Support (S3) = S1 – (H – L)

Where, H=High, L = Low, C = Close

These equations above can be also applied to weekly, monthly Pivot calculations.



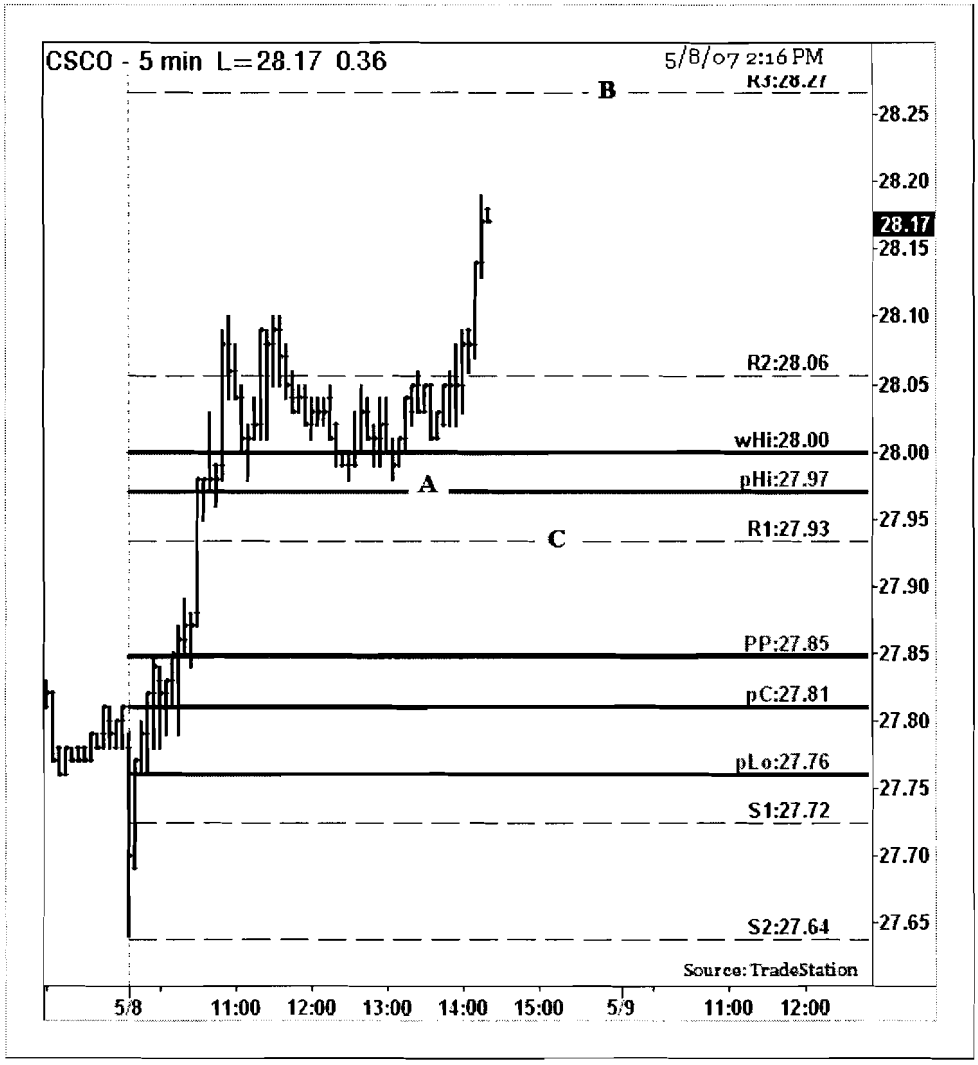
Trading Floor Pivots



Trading Floor Trader Pivots

The example above illustrates Pivot levels from the ER2 15m chart. On February 8th, the market traded in a narrow range around the Pivot level suggesting a contraction in the volatility. On the following day, ER2 opened above the previous close and traded near the previous day's high but could not hold on to this high prices. After the first hour, prices traded below the Pivot level at 817.8 suggesting a potential volatility/range expansion. ER2 continued to trade below the Pivot point, but above the key support level S1 until lunch time. At around 12:30p.m., ER2 broke through the key support level S1 at 814.5. A "short" trade was entered below the S1 level. The potential targets were the previous day's low at S2 levels. The volatility expansion was very strong as the market fell through S2 at 808.3 level suggesting a potential target S3 at 798. At around 2pm, the market stabilized at S3 level and attempted a rally back towards S2 level.

Trading Floor Pivots



Trading Floor Pivots

The chart above shows Floor Pivots from the Cisco (CSCO) 5 minute chart. On May 8th, in anticipation of CSCO's earnings report, the company rallied above the pivot level. A trade setup was presented when CSCO traded above the weekly high, but below the second resistance at R2. CSCO prices traded above the previous day's high at 27.97 and Pivot at 27.85 to suggest a potential bullish trend. At around 2 pm, CSCO closed above R2 to present a low-risk day trading opportunity.

1. Enter a "long" trade 5 cents above resistance at R2.
2. Place a "stop" loss at the previous high (at $27.97).
3. Place a "target" at the third resistance R3 (at $28.27).

3.2. Globex (Overnight) Pivots

Globex (Overnight) Pivots

Pit traders use Globex or overnight trading information extensively to determine key market trading levels for the current trading day. Globex trading hours start after the regular markets close and end before the regular markets open. For example, the Russell 2000 EMini futures on Chicago Mercantile Exchange (CME), the regular market hours are from 9:30 am ET to 4:15 pm ET. Globex trading hours for Russell 2000 futures starts at 4:30 pm ET and ends at 9:29 am ET. Similarly, the Dow Emini futures on Chicago Board of Trade (CBOT), has regular trading hours from 9:30 am ET to 5:00 pm ET. The Globex trading hours for Dow Emini futures are between 5:01 pm ET to 9:30 am ET.

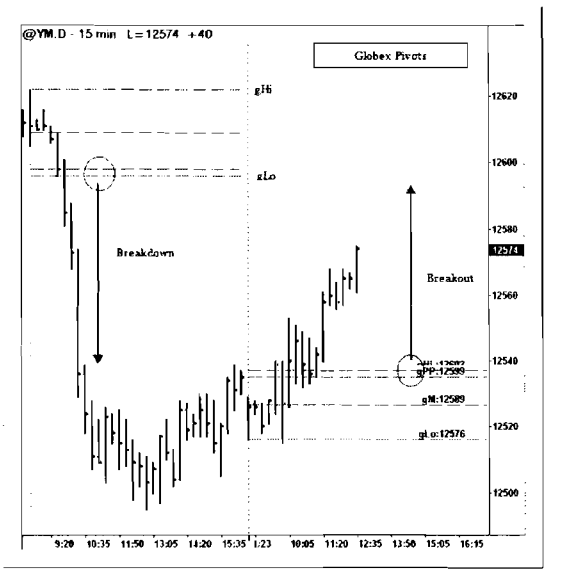
Unlike floor pivots, most traders use only Globex High, Globex Low and Globex Pivot values. Globex High, Low and Close levels are used to compute the pivot price level. The Globex pivot value and the high and low levels are used for measuring market strength and weakness. During most trading days, the Globex pivots may be valid until noon as traders still remember the Globex high and low levels. They are very effective in the first hour of market open. Like regular pivot levels, Globex highs and Globex lows are used for resistance and support levels. The first hour test of these levels and reversals from Globex highs and Globex lows are significant in intra-day trading.

Globex Pivots

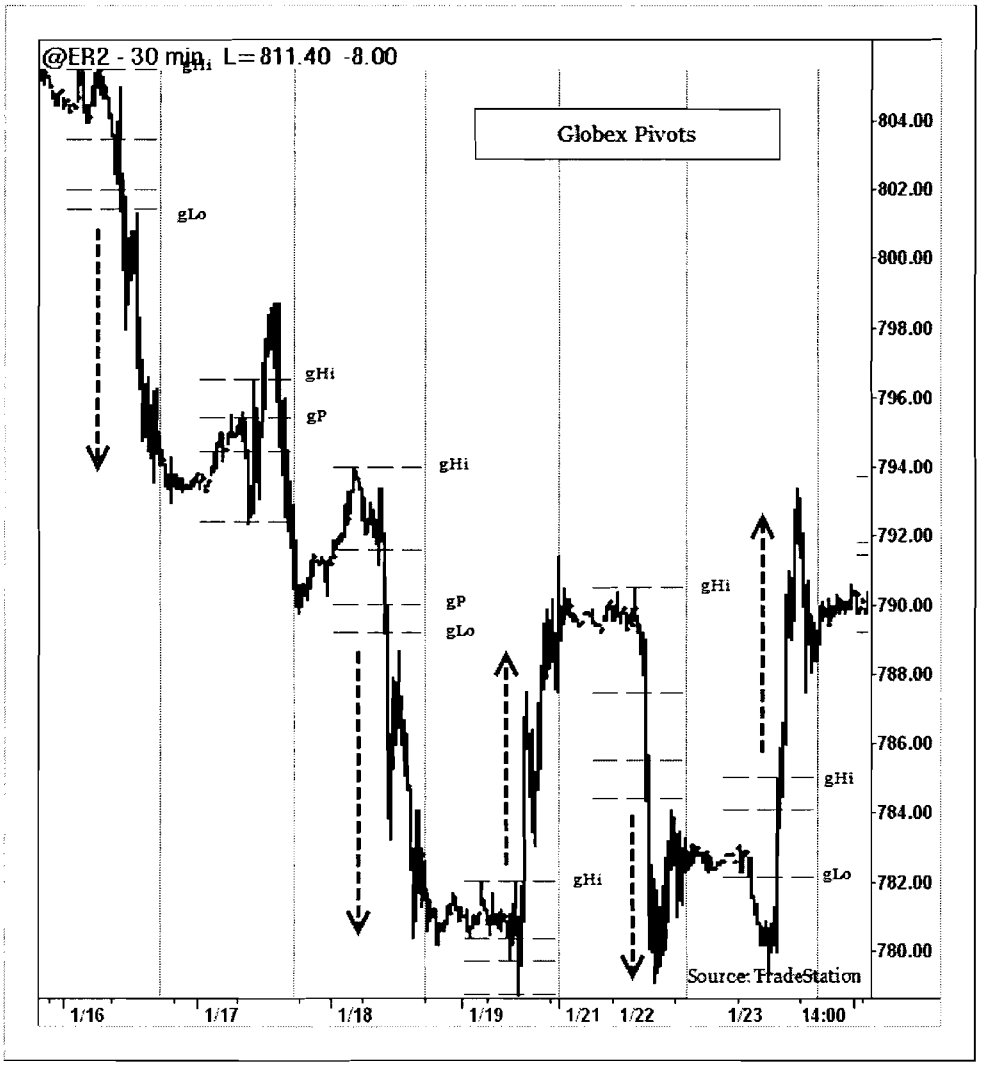
Pivot Point = (H+L+C)/3

Where,

H = High of Globex Range
L = Low of Globex Range
C = Close of Globex Range



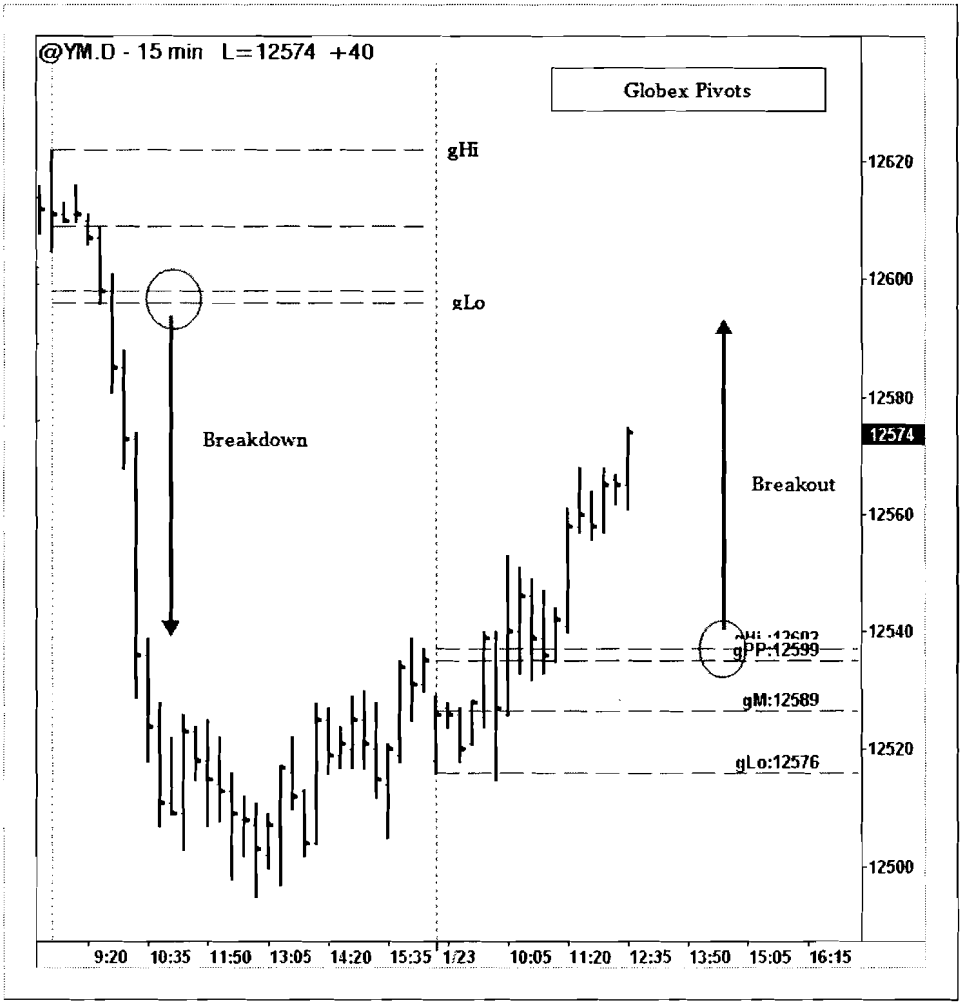
Trading Globex (Overnight) Pivots



Trading Globex Pivots

Globex pivots are for the overnight trading range. Globex pivot levels act as key resistance and support levels. They are mostly effective during the first few hours (until lunch hour) of trading. The example above shows the Russell Emini futures (ER2) from the 30 minute chart (24 hour chart). Globex high, low, Globex midpoint and Globex pivots are plotted on the chart. Arrows are placed on the chart to highlight the breakouts and breakdown from Globex high and low levels during the intra-day trading.

Trading Globex (Overnight) Pivots



Trading Globex Pivots

The chart above shows Globex pivot values from the Dow (YM) Emini Futures 15 minute chart. The chart shows January 22nd and January 23rd Globex pivots. On most trading days, when markets trade through Globex lows, it strongly suggests a weaker market, and when markets trade above the Globex highs it suggests a stronger market. On January 22nd, YM traded below the Globex low during the first hour at 12600 and traded all the way to a low of 12500. On January 23rd, YM traded above the Globex high during the first hour (above Globex pivot 12540) suggesting higher values for the rest of the day.

3.3. Opening Range Pivots

Opening Range Pivots

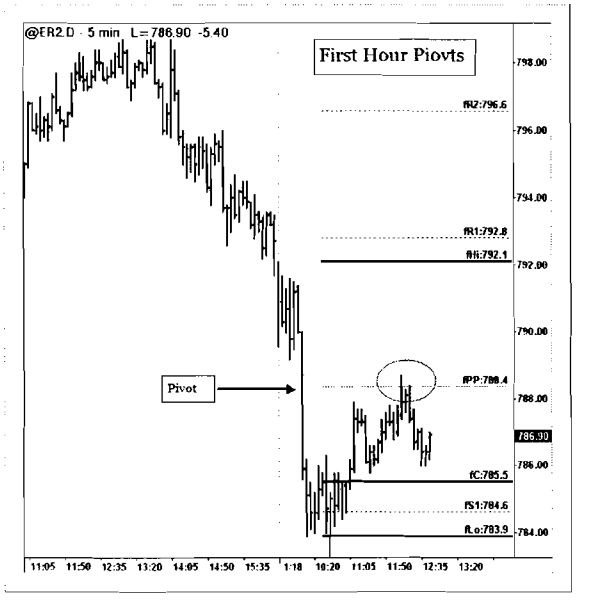
The Opening Range time is the initial time frame of trading for a stock or commodity at the start of each new trading session. For day-traders, this range could be the first 15 or 30 minutes and for swing or position trades it is the first hour range. Once this range is identified, the first hour pivots and support/resistance levels are calculated. This range usually sets the direction for the day and acts as important levels for intra-day trading.

Trading using the Opening Range pivot produces excellent results. In stronger markets, a long trade is initiated when prices pullback to the Opening Range pivot. A target for this trade is set at the first resistance. In weaker markets, prices crossing below the Opening Range pivot could signal a trend reversal and a short trade may be initiated.

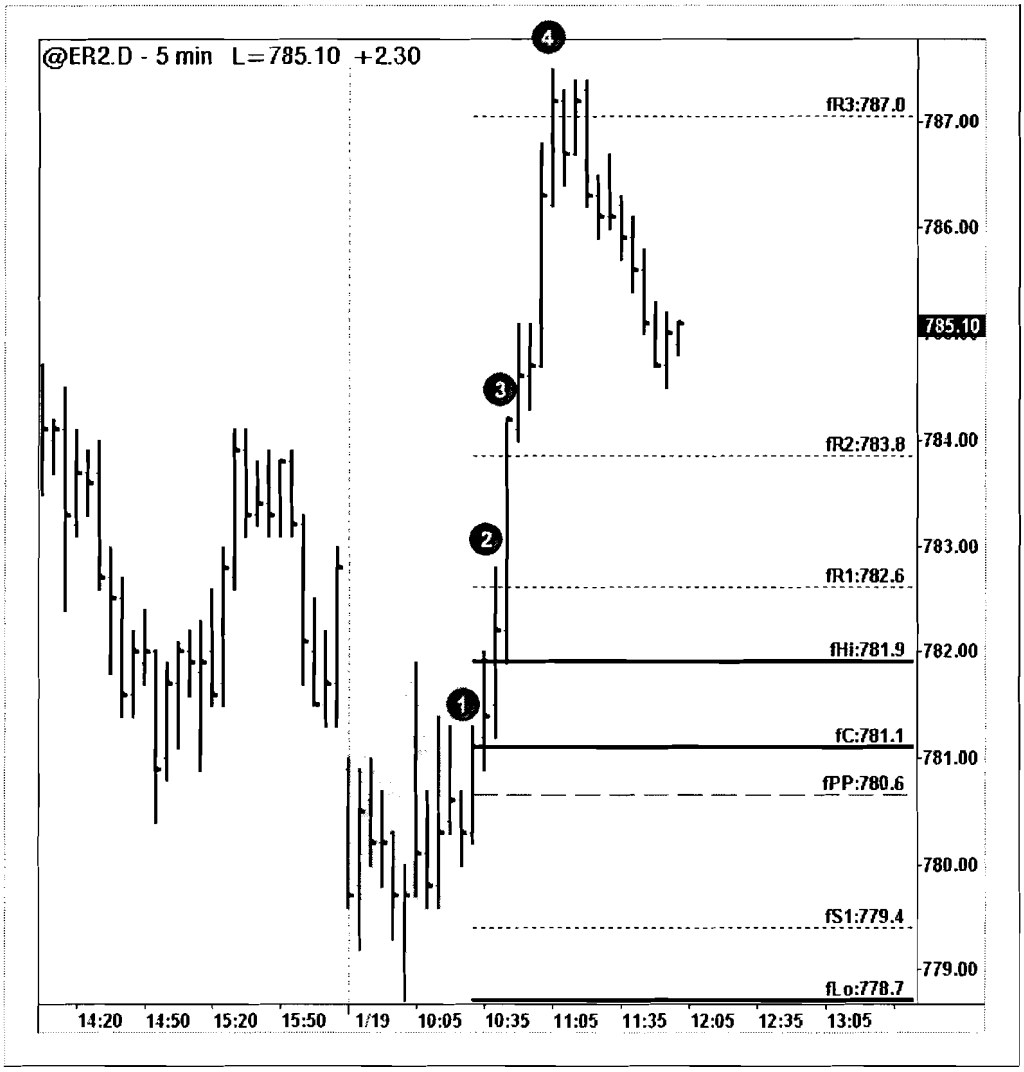
Confluence of daily pivot levels and first hour Opening Range Pivots could be significant in trading. Most days, the first hour of highs and lows clearly signal the market's strength. Trading below the pivot and the first hour lows set the market in a bearish mode. Similarly, trading above the first hour high and above the first hour pivot sets the market in a bullish mode. The advantage of using Opening Range pivots is market stability. In the first 30-60 minutes (the amateur hour) of the market open, prices go through a series of gyrations to settle on a market direction for the rest of the day. Most seasoned traders wait for prices to pick a clear market direction with the opening range (the first hour) data before start trading.

Opening Range Pivot Calculations

Pivot Point (PP) = (H+L+C)/3
First Resistance (R1) = 2*PP –L
First Support (S1) = 2*PP - H
Second Resistance (R2) = PP + (R1-S1)
Second Support (S2) = PP – (R1-S1)
Third Resistance (R3) = R1 + (H – L)
Third Support (S3) = S1 – (H – L)



Trading Opening Range Pivots

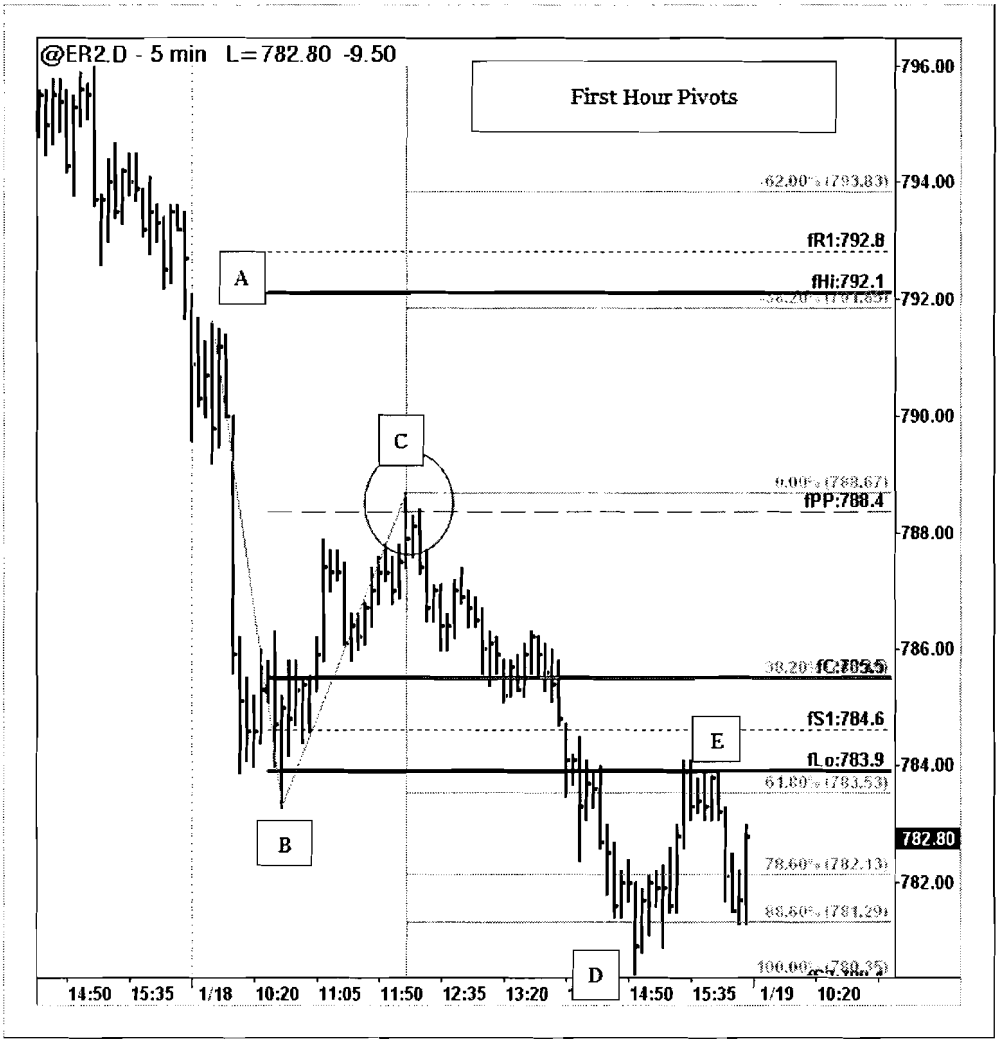


Trading Opening Range (First Hour)

The example above illustrates the Opening Range pivots from the ER2 5m chart. On January 19, 2007, ER2 traded in a narrow range in the first hour-Opening Range (shaded area) from 778.7 to 781.9 and closed at 781.1(at marker 1). After the first hour of trading, ER2 set to trade above the Opening Range high at 781.9 and the Opening Range pivot at 780.6 signaling an upside day with range expansion.

1. Enter a "long" trade above the first hour high at 781.9.
2. Place targets at R2 and R3 levels.
3. Place a "stop" order few ticks below the pivot at 780.6.

Trading Opening Range Pivots



Trading Opening Range (First Hour) with ABC Pattern

The chart above shows Opening Range pivots along with an ABC pattern trade. On January 18, 2007, ER2 opened at a high of 791.8 and drifted lower in the first hour to trade near 784 area. After the first hour of trading, ER2 attempted to rally to the first hour pivot at 788.4 to form an ABC pattern. The trend and market direction was weak as prices continued to trade below the first hour pivot and the first hour high. Prices attempted to rally, but around noon, ER2 could not close above the first hour pivot and reversed its direction to signal a potential short trade.

1. Enter a "short" below the first hour pivot at 787.8.
2. Place a "stop" order above the first hour pivot at 788.5.
3. Place a target from 78.6% to 100% of AB range (from C) to 781.3.

3.4. FibZone Pivots

Fibonacci Zone Pivots

John T. Jackson described a concept called "Zone Probability Pattern Analysis," in his book *Detecting High Profit Day Traders in the Futures Markets.* In his book, he describes the dynamic statistical analysis of "Fibonacci Zones" using Open, High and Close to find high percentage support and resistance zones for the entire trading day.

Robert Krausz has completed extensive analysis on "High Probability of the Fibonacci Zones" (HPFZ) concept by using "Probability Matrix." Krausz used various close and open combinations as price moves from zone to zone to achieve the highest probable Open to Low combination for the day.

In this chapter, I present how I use Fibonacci Zone Pivots for my trading. I use HPFZ zone concept as boundaries for trading key support and resistance areas. For additional analysis, please read J.T. Jacksons' book on Zone Pattern Probability Analysis (See References)

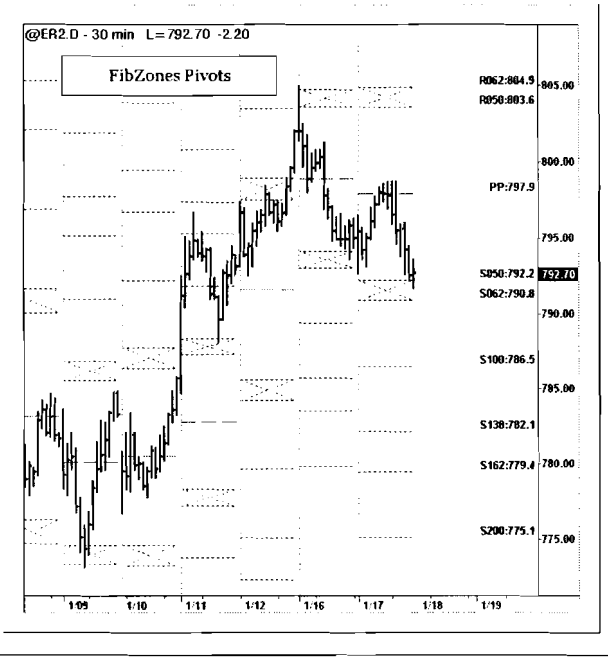
Computing FibZone pivot starts with calculating the pivot (High+Low+Close)/3 for the current day and then projecting the "zone pivots" for next day. Adding daily range and its multiples to this pivot point gives various potential resistance and support levels. The boundaries of these resistance/support levels are marked as FibZones. An extensive study has been done on the relationship between yesterday's close and today's open within these zones to find a potential daily "close" for the current day. I use FibZones in my personal trading and have found them to be valid and useful. My usage of HPFZ is limited to finding intra day resistance and support areas and not for the zone analysis.

FibZone Pivots

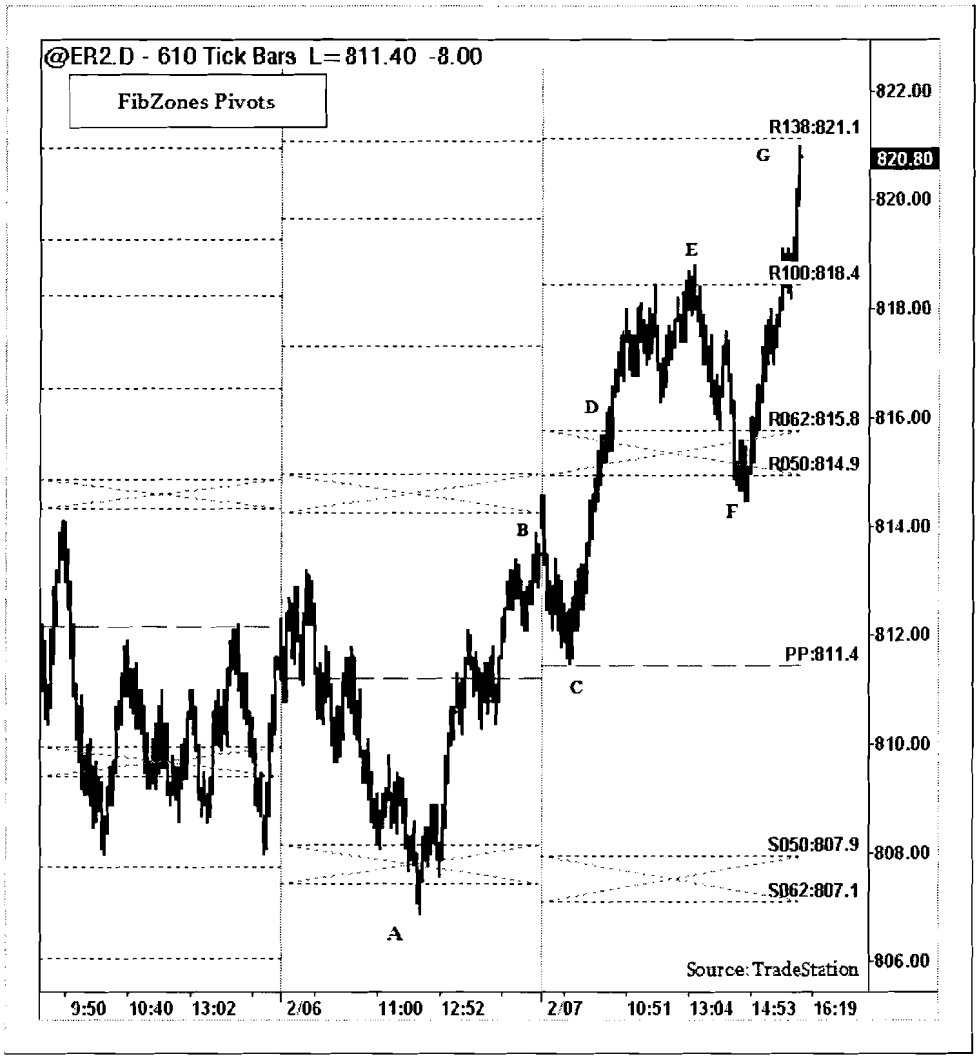
Pivot Point (PP) = (H+L+C)/3
Daily Range (DR) = (H-L)
First Resistance (R1) = PP + 0.5*DR
Second Resistance (R2) = PP + DR
First Support (S1) = PP – 0.5*DR
Second Resistance (S2) = PP – DR

Resistance Band (RB1) = PP + 0.618*DR
Support Band (SB1) = PP – 0.618*DR

Resistance Band (RB2) = PP + 1.382*DR
Support Band (SB2) = PP – 1.382*DR



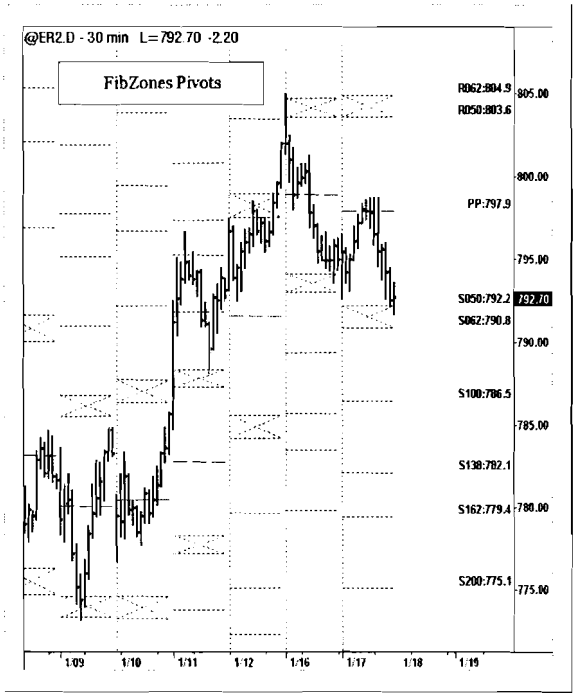
Trading Fibonacci Zone Pivots

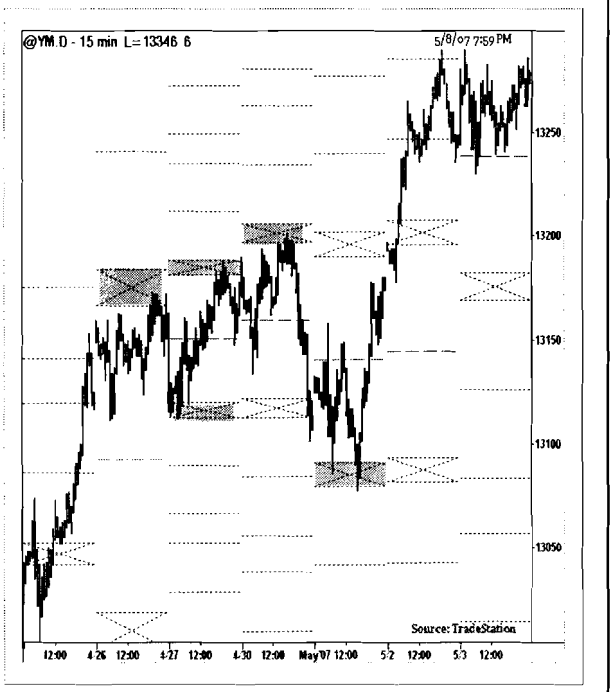


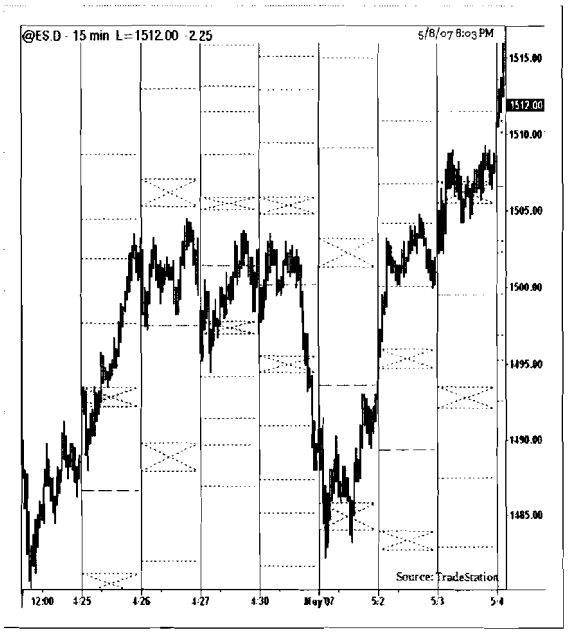
Trading FibZone Pivots

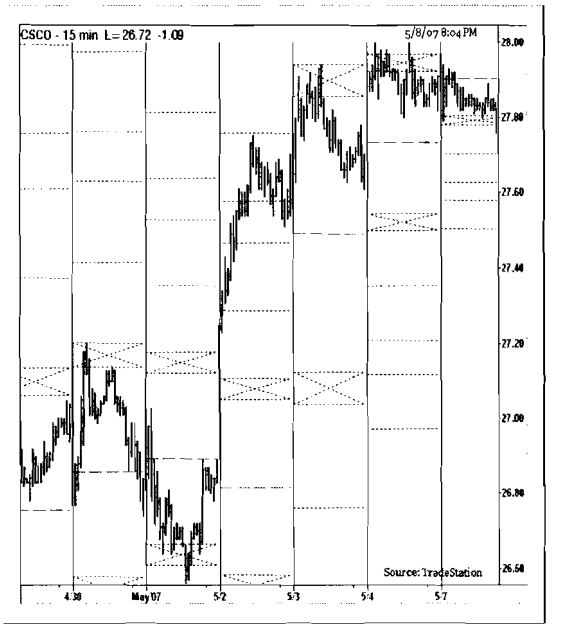
The example above shows FibZone pivots plotted from the Russell Emini futures (ER2) 610 chart. Fibzones are plotted at the end of the day for the next trading day. On February 6th, ER2 sold-off and found support near the "support" band between the S50 to S62 range. In the afternoon, ER2 rallied back from "support band" (A) and closed in the "resistance band" (B). The following day, ER2 had a brief sell-off to the pivot point (C) and rallied to the "resistance" band (D). The first test of resistance to the rally came in the afternoon at 100% of range test E. A pullback to the "resistance" band-R50 to R62 is expected after the morning rally to (F). Another continuation of the rally, sent prices to 138% of previous day range above pivot level (G).

Trading Fibonacci Zone Pivots









Chapter 4: Fibonacci

4.1. Fibonacci Trading

Fibonacci Methods

Fibonacci numbers are pervasive in the universe and were originally derived by Leonardo Fibonacci. The basic Fibonacci ratio or "Fib ratio" is the Golden Ratio (1.618). Fibonacci Numbers are a sequence of numbers where each number is the sum of the previous two numbers.

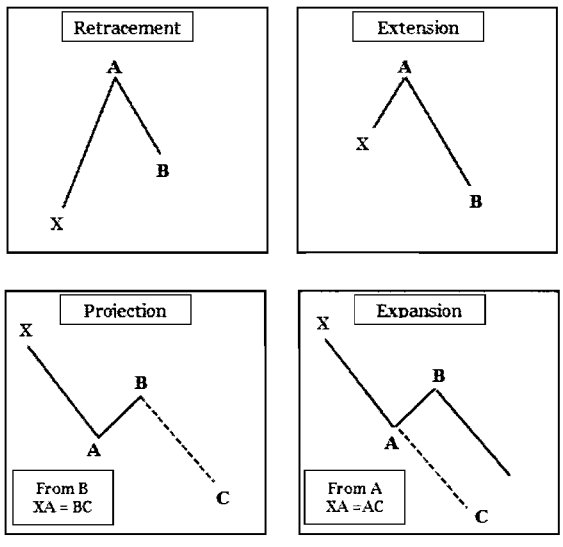
The series of Fib Numbers begin as follows: 1,1,2,3,5,8,13,21,34,55,89,144,233,317,610....

There are plenty of materials and books about the theory of how these numbers exist in nature and in the financial world. A list of the most important Fib ratios in the financial world which are derived by squaring, square-roots and reciprocating the actual Fibonacci Numbers are depicted below:

Key Set of Fibonacci Derived Ratios in Trading are:
0.382, 0.500, .618, 0.786, 1.0, 1.272, 1.618, 2.0, 2.62, 3.62, 4.62

Secondary Set of Fibonacci Derived Ratios in Trading are:
0.236, 0.486, 0.886, 1.13, 2.236, 3.14, 4.236

Most trading software packages have Fibonacci drawing tools which can show Fib retracements, Fib Extensions and Fib Projections. In addition. Fib Numbers are also applied to "time" and to "price" in trading.



Types of Fibonacci

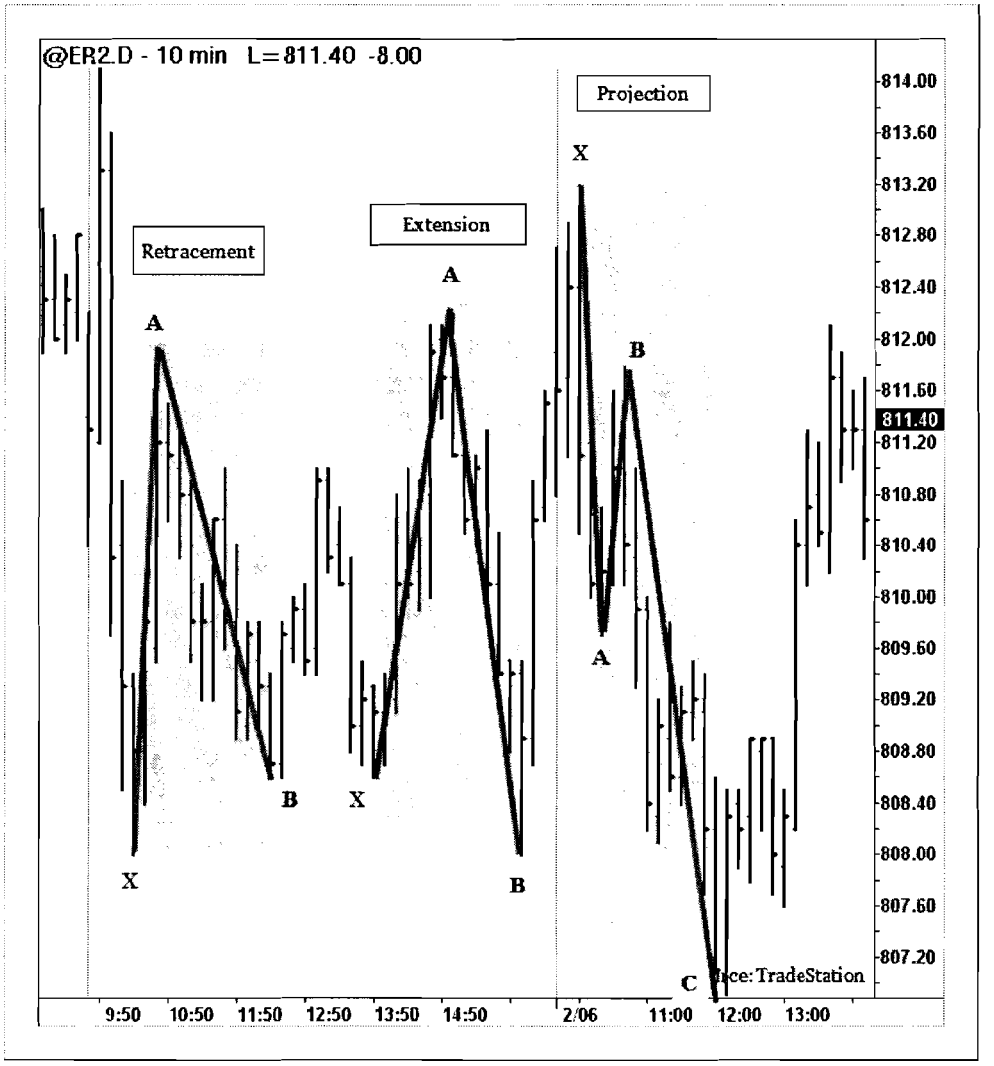
Retracement: From the swing XA, a Fibonacci ratio length is retraced to B.

Extension: From the swing XA, more than 100% of the swing XA is extended from A to B.

Projection: From the swing XA, a retracement is made to form the AB leg. The swing XA is projected from B to C.

Expansion: From the swing XA, a retracement is made at B to form AB. A projection is plotted from A in the same direction and length of XA to C.

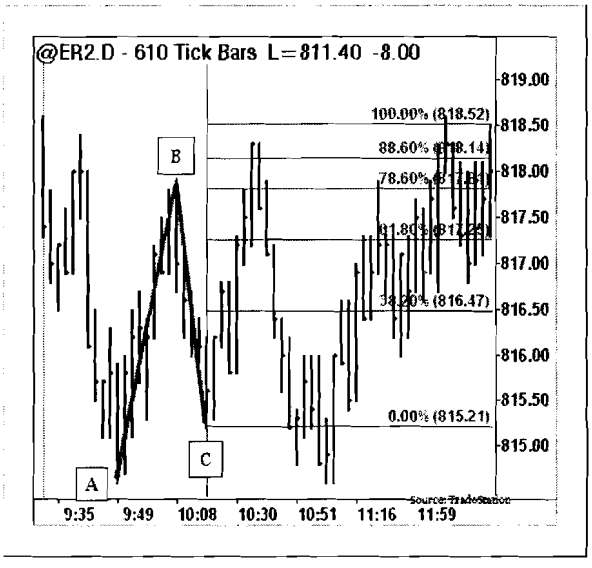
Fibonacci Trading



Fibonacci Trading

The chart above illustrates Fibonacci trading from the Russell Emini futures (ER2) 10 minute chart. First, a retracement is shown in the shaded area for XA to AB. Secondly, an extension of XA to AB is shown. Thirdly, the projection of the XA length is made from B to C. In the forgoing projection example, B was retraced to .62 of XA and then a projection of 1.27 to 1.62 of XA swing is expected. C was formed at 1.38 of XA.

Fibonacci Drawing Tools



Retracement and Extension Drawing Tools

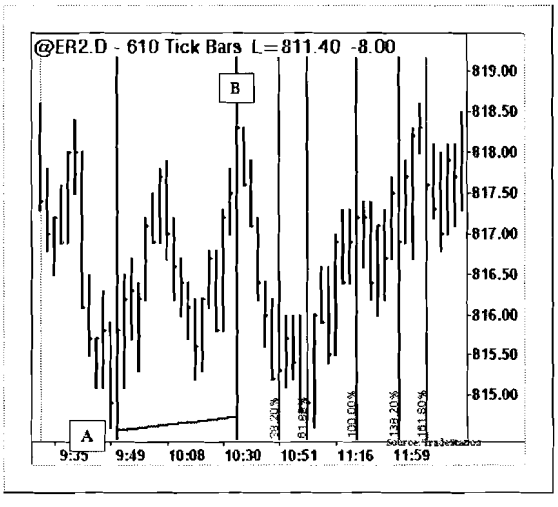
Most software packages have Fib retracement and extension drawing tools. These tools allow a user to pick a "swing high" and "swing low" and draw retracement and expansion levels. The Fib levels can be also customized for various Fib Numbers.

Another Fib drawing tool is an extension tool. This tool lets a user pick three different swing points A, B and C and then draw "swing" extensions from C. This is a very valuable tool since it plots fib. levels from the trade level C.

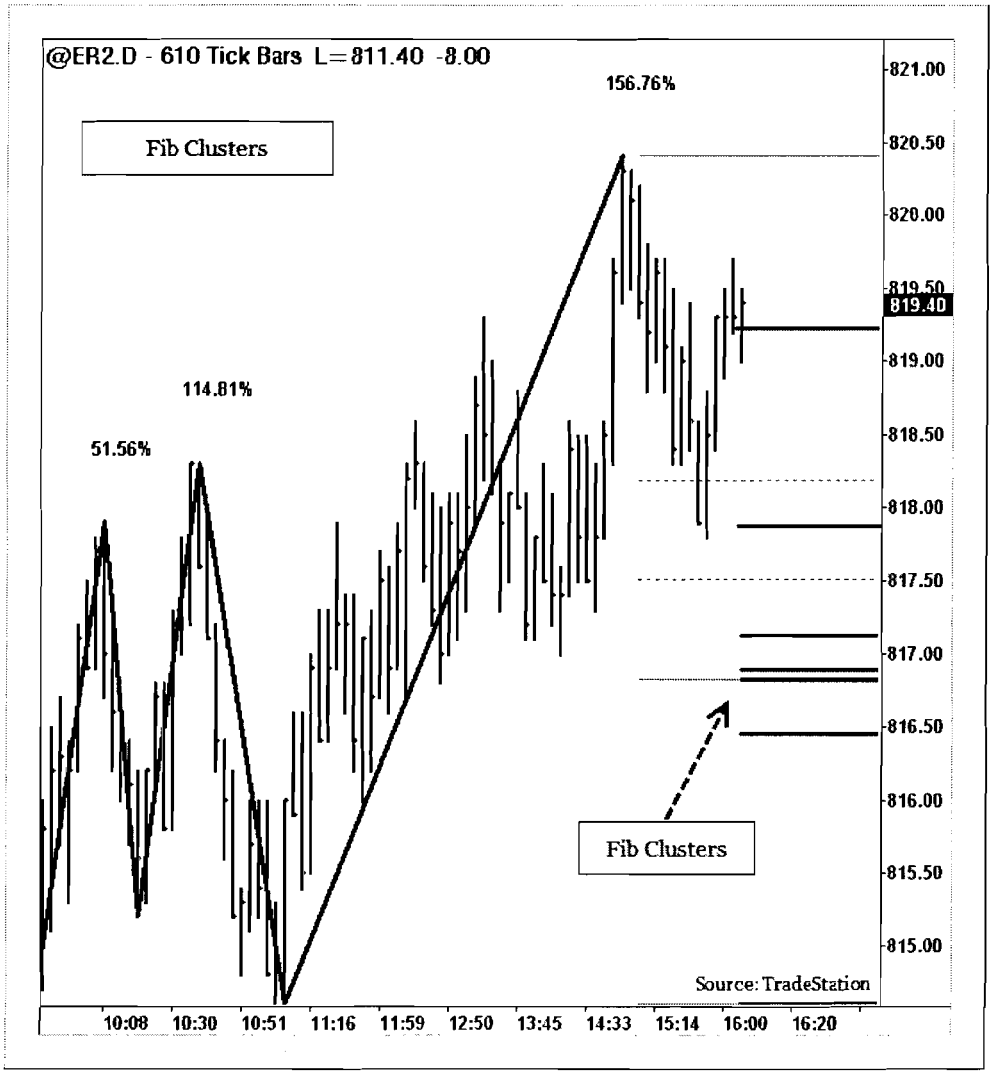
Fibonacci Time Extension Tool

Fibonacci extensions can also be measured for "time" levels. Most software packages also provide a Time Extension tool.

This tool helps find key turning points using "Fib Time." It allows a user to pick a "swing low" at A and a "swing high" at B and plot the Fib Time extensions from this time-frame. The projected time levels provide the user with potential "swing" turn points.



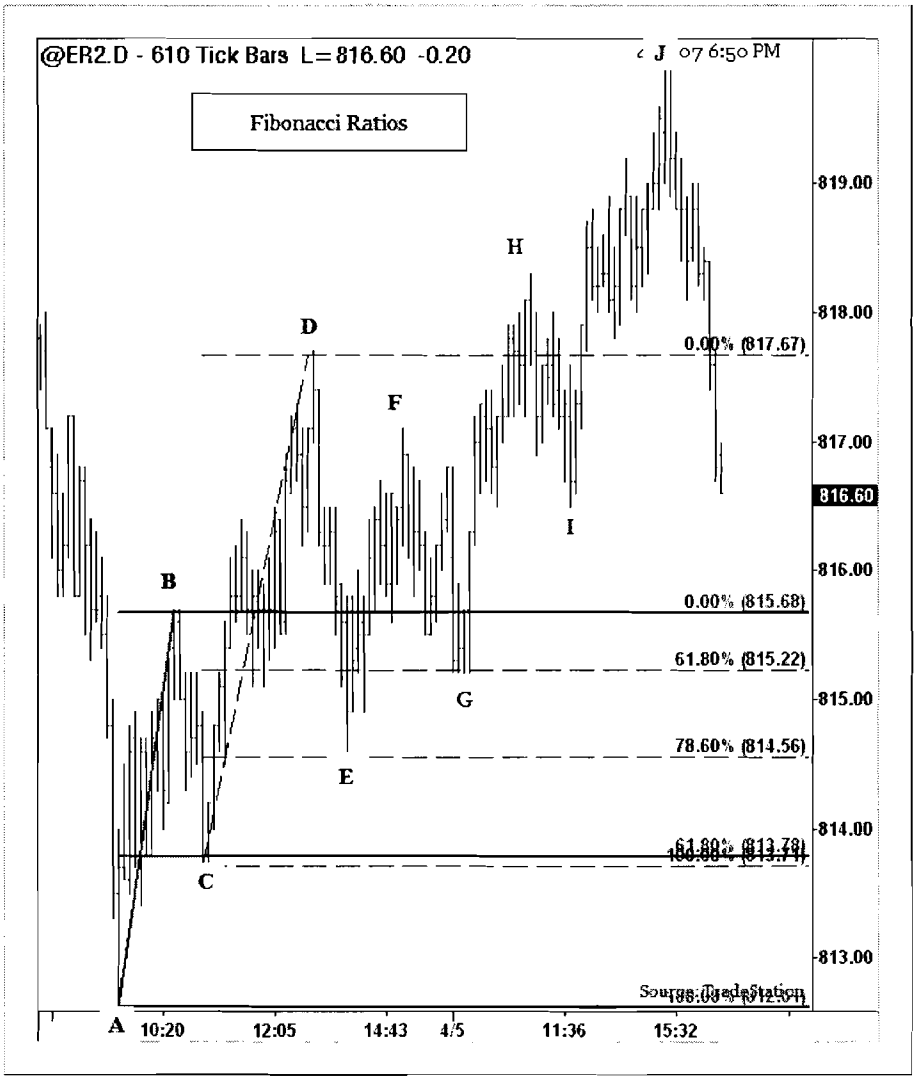
Fibonacci Clusters



Fibonacci Clusters

A confluence of Fib. retracement numbers signifies a stronger area of support and resistance. The confluence of multiple Fibonacci retracements in a fairly tight area are computed using prior swings both retracement and extensions with certain criteria. Then each Fib retracement/extension level is grouped to generate a confluence within some threshold to find Fibonacci clusters in an area. These "cluster" levels are more significant than a single fib retracement itself. The trades are either initiated or closed at these confluence levels.

Trading Fibonacci Retracement Levels



Trading Fibonacci Retracement Levels

The chart above illustrates an example of trading Fibonacci ratio levels from the Russell Emini futues (ER2) 610 tick chart. One of the effective method to trade Fibonacci levels is to trade pullbacks in the direction of its primary trend near the Fibonacci retracement levels. For the first "swing" at AB, trade reversal occurred at the 61.8% retracement level. A "long" trade is entered at C with a "stop" order placed below A. On the second "swing"at CD, a "long" trade is entered at the 61.8% retracement level. The swing retraced to E to 78.6%, but rallied back into DE swing. For the second trade, a "stop" order is placed at C. Targets are set at the top of "swing highs" at A, D, F and H.

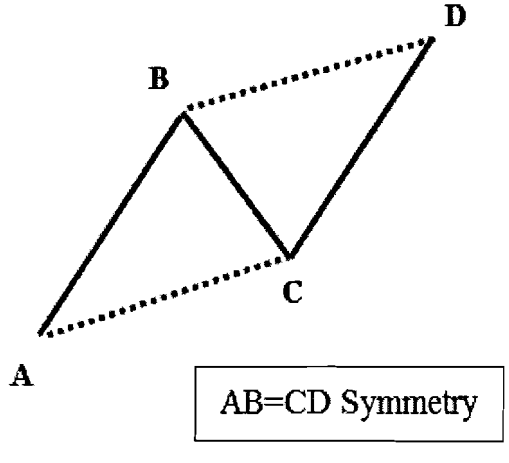
4.2. Symmetry Patterns

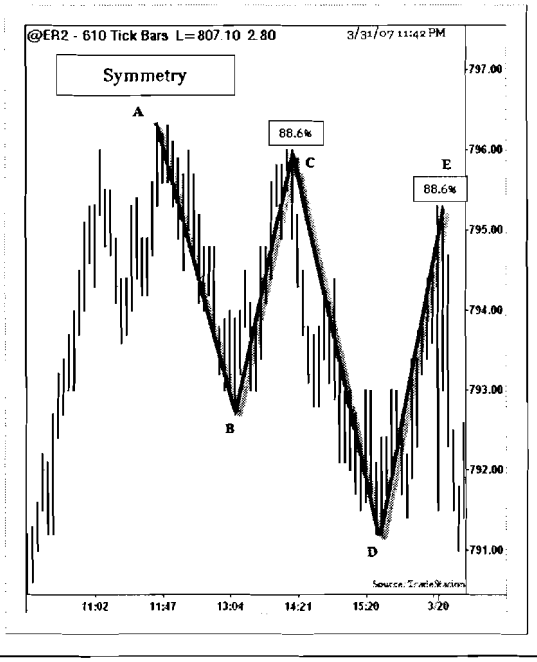
Symmetry Patterns

Markets demonstrate repetitive patterns where prices oscillate between one set of price ratios to another making price projections possible. Market trends can be defined by geometric relationships as they exhibit harmonic relationships between the price and time swings. Markets also form "cycles" around the price and time levels. Many investors/traders use "cycles" and "harmonic" relationships to project future swing prices and times.

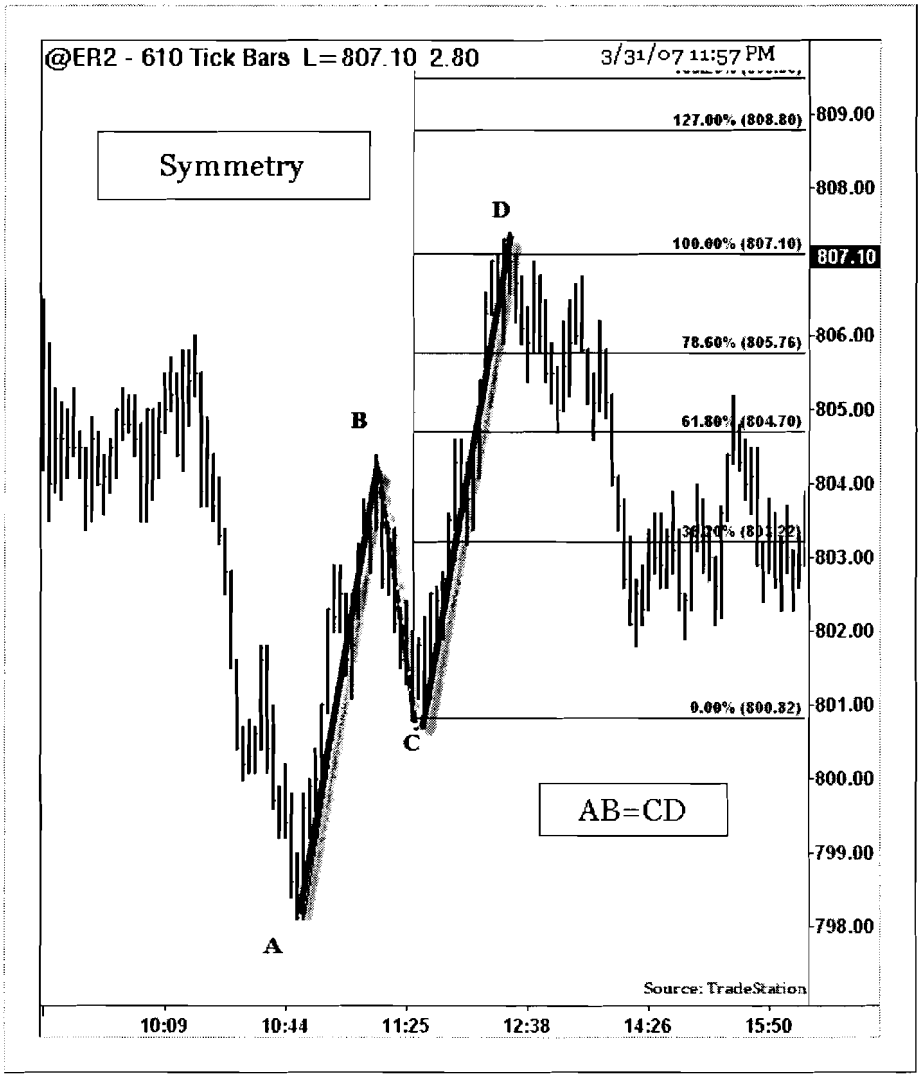
"Symmetry" is visible in all markets and in all time-frames. "Symmetric" rallies and declines give traders an advantage to determine the key turning points. A cluster of similar extensions and similar retracements at key price ranges, or some important levels provide insights into future significant resistance and support levels. In addition to knowing key turning points, the benefits of trading symmetric "price/time" cluster levels include low-risk trades.

Gann, Fibonacci and Elliott all have studied market symmetry and found valid theories. These patterns exist in all forms in nature and certainly exist in the markets. One of the best ways to confirm "Symmetry" in the markets is to check "price" and "time" using two or more cluster confirmations. Another key method to compute these patterns is to use "percentage change of price" between market "highs" and market "lows." "Symmetry" is a science by itself and traders take great advantage of knowing the potential turning points/levels using these methods.





Trading Symmetry Patterns

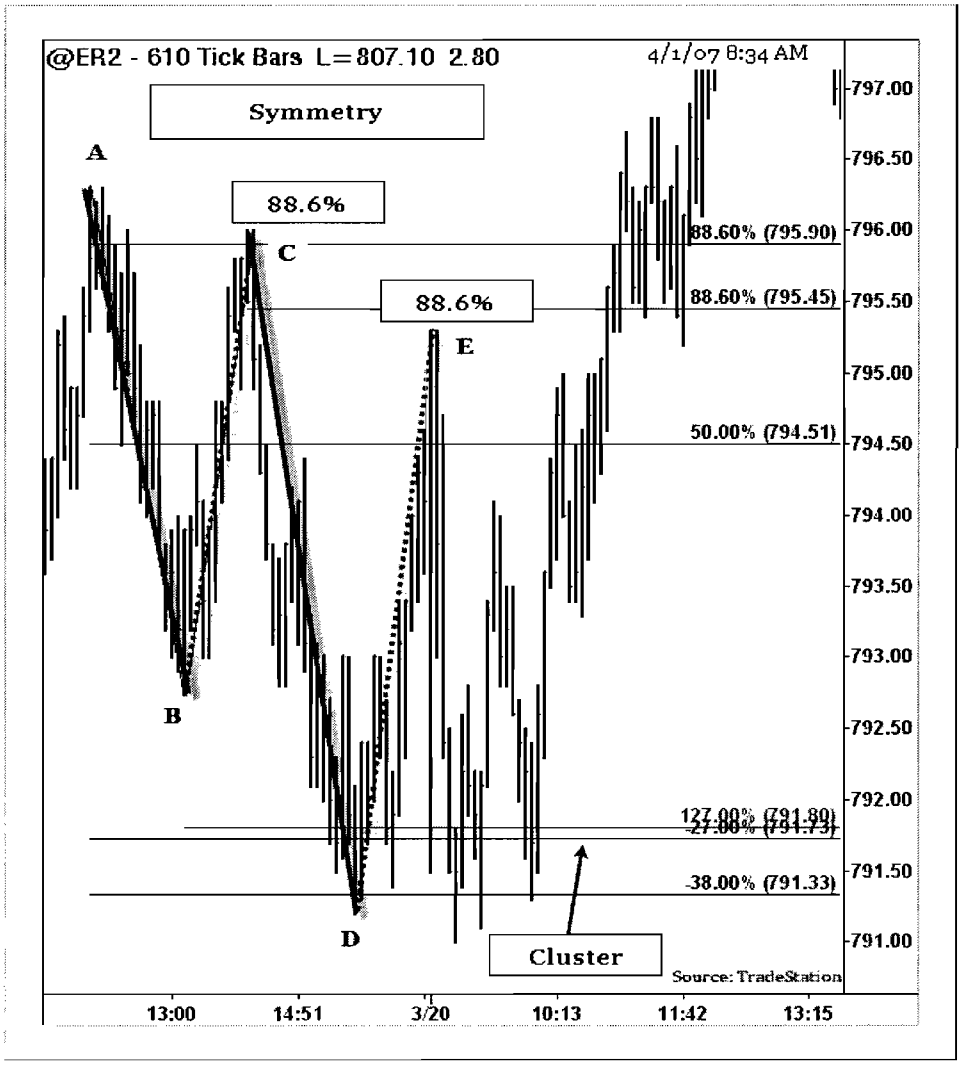


Trading Symmetry

The chart above illustrates the "Symmetry" pattern from the Russell 2000 futures (ER2) 610 tick chart. Symmetrical swing lengths are shown after a 50% retracement at BC swing. Market "symmetry" of 100% extension is expected after a retracement of less than 50% retracement levels. If the retracement exceeds 50%, the extension may be less than or equal to 100%.

1. After 'BC' retracement, enter a "long" trade one-tick above the B.
2. Place a "stop" order one-tick below the low of "C".
3. Target 100% of the AB range from level C to D.
4. Another potential retracement is expected at D to 50% of the entire range of AD.

Trading Symmetry Patterns



Trading Symmetry

The example above shows "Symmetry" and cluster of harmonic ratios from the Russell 2000 (ER2) 610 tick chart. After BC retracement of 88.6%, a Symmetrical extension at CD is formed near the "cluster" zone. This zone is where two or more harmonic levels are grouped at a single level. The "cluster" is formed at the retracement of 127% to 138% of AB and 127% of BC swings. The zone also acts as key support and resistance areas for trading. After another retracement of DE at 88.6% from the "cluster" zone, ER2 rallied to new intra-day highs.

4.3. Market Fractals

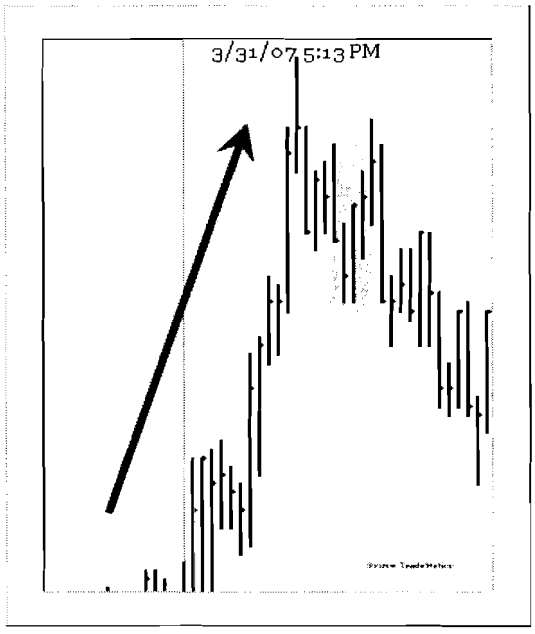
Market Fractals

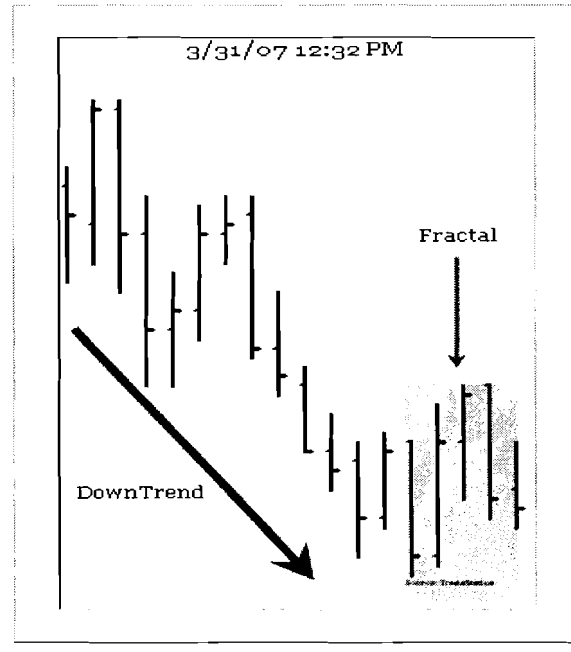
Financial markets are Complex, Non-Linear and Chaotic. Chaos is the highest form of order and posses a highly deterministic behavior. These chaotic market behaviors are represented by graphical structures usually initiated by a pattern called "Market Fractal." Trader's decisions are usually decided by complex series of events and these events influence price changes in the markets. Many times, all these events are rhythmically synchronized with Momentum, Volume, Time and Price. Price is the last one in this series to be effected. Traders get significant benefits from knowing the beginning of market structures (Fractals). It's not easy to identify market "Fractals" but there may be a set of rules and patterns/events which may help traders to identify them.

"Fractals" are similar patterns which repeat themselves. A beginning "Fractal" pattern resembles the overall pattern of the entire market structures. Fibonacci numbers and Elliott wave patterns were first initiated by "Fractals". On the expansion, Elliott waves consist of a series of "Fractal" structures.

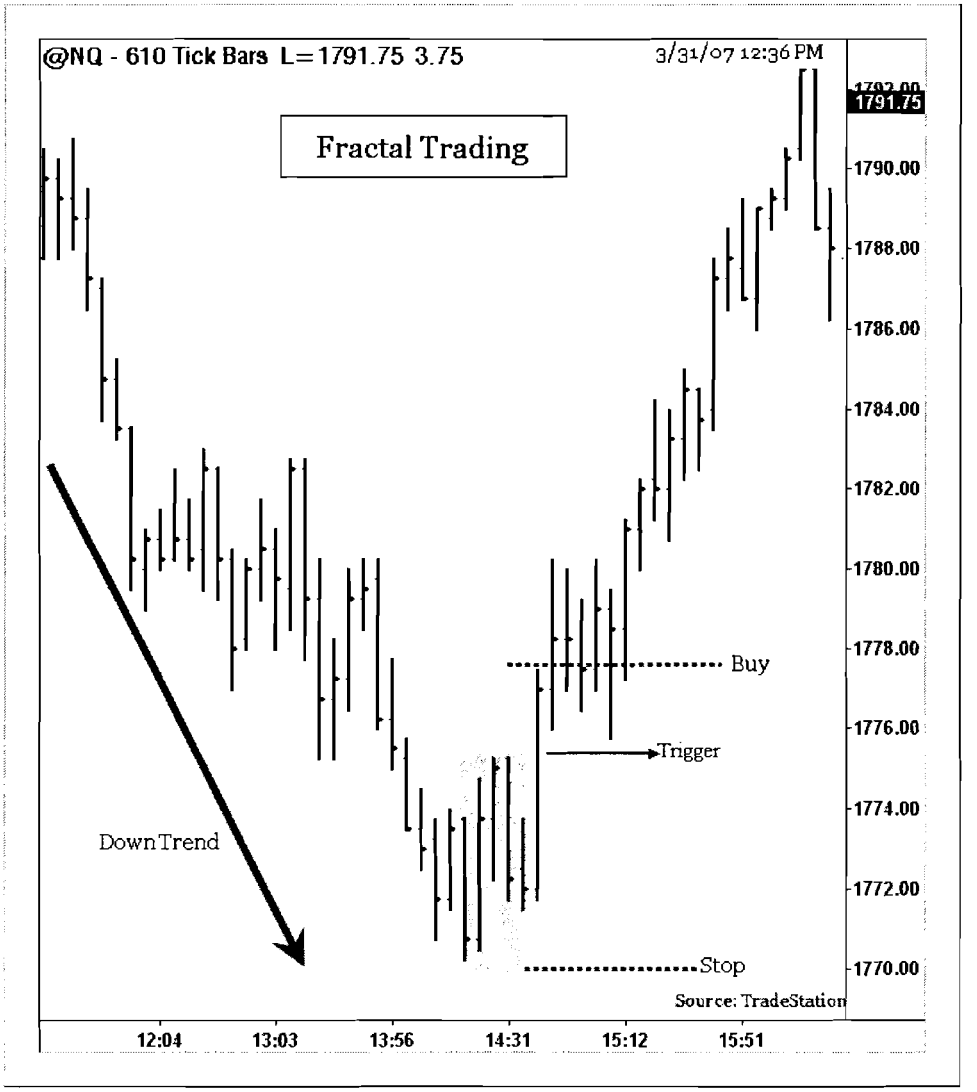
In a simplest market form, as an example, a "Fractal" consists of 5 bars. After a prolonged downtrend in the markets, a 5-bar "Fractal" is formed to signal a potential change in the trend. This "Fractal" has three bars with higher highs and two bars with lower lows. Trades are initiated when another higher-high is formed after this 5-bar "Fractal". A bearish "Fractal" is the reverse of the above.

As in any technical indicator, "Fractals" form, fail, re-fail and re-form. "Fractals" work in all markets and in all time-frames. Fractal theory is very powerful, but it does need confirmation indicators such as Momentum, Divergence and price-action to be valid.





Trading Fractal Patterns

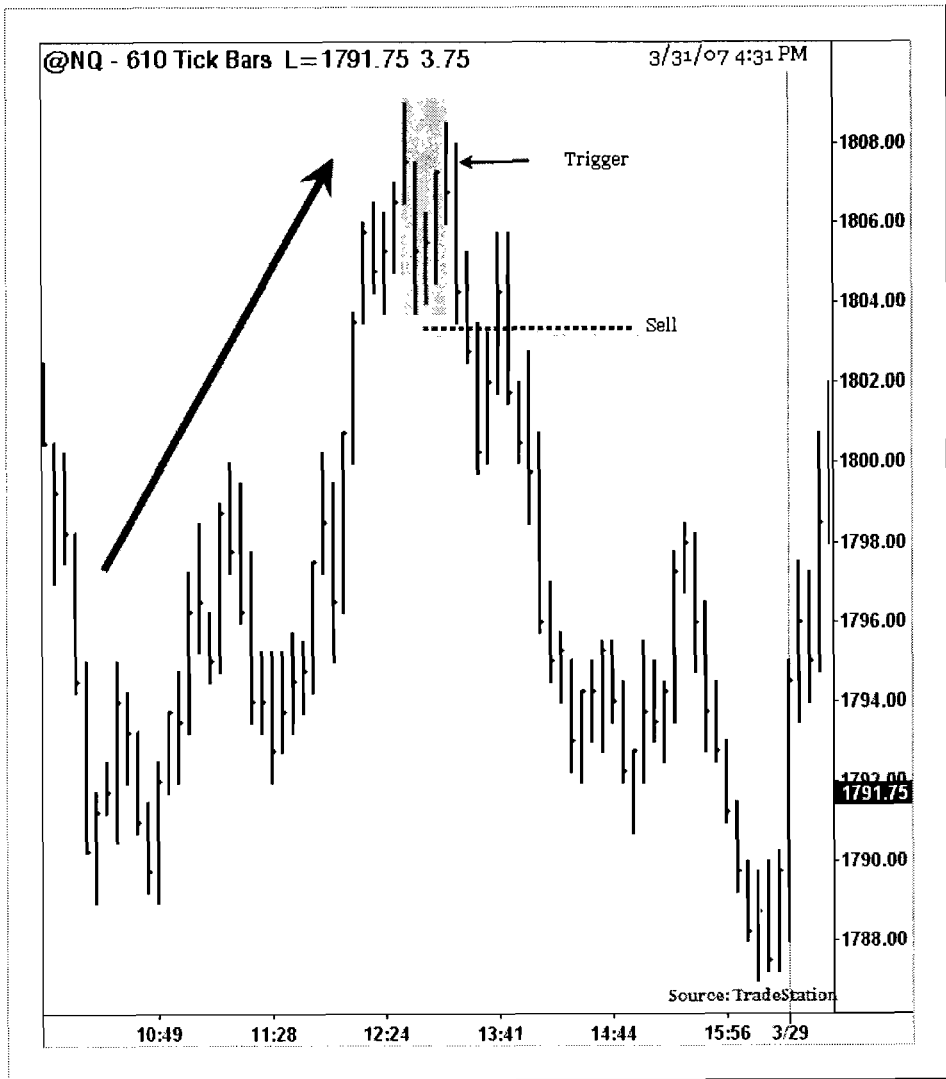


Trading Fractal Patterns

The example above shows a "Fractal" pattern formation from the Nasdsq Emini futures (NQ) 610 tick chart. On March 29, 2007, NQ futures were in a downtrend all day and lost over 20 points. At about 2:30pm, NQ made a series of higher-highs followed by two lower-low bars to form a "Fractal." This "Fractal" suggests that a down-trend may be over and a significant trend change may be in the works.

1. After a 5-bar "Fractal" formation, wait for a bar to close above the previous bar's high and enter a "long" trade above the previous bar's high.
2. Enter a "stop" loss order below the "Fractal" patterns low.
3. Place a "target" at previous "swing high."

Trading Fractal Patterns



Trading Fractal Patterns

The chart above illustrates an example of sell "Fractal" pattern from the Nasdaq futures (NQ). NQ futures rallied in the morning session and closed near 1808. A series of bars attempted to trade "lower lows" and "higher highs" to form a "Fractal" pattern. A trigger bar is anticipated for a short-sell after a "fractal" formation is complete.

1. Wait for trigger bar, which is a "close" below the low of the previous bar to confirm the "fractal" setup.
2. Short below the low of the trigger bar.
3. Place a "stop" order one tick above the high of the trigger bar.
4. Target a major "swing low" prior to the "Fractal" formation.

Chapter 5: Harmonic Patterns

5.1. ABC Patterns

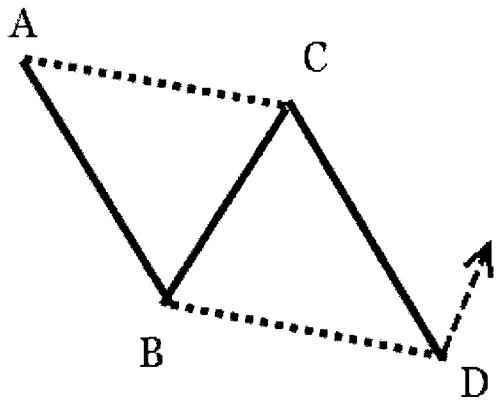
ABC Patterns

The basic "ABC" pattern is first described in H.M. Gartley's book, *Profits in the Stock Market* (1935). This pattern is shaped like a lightning bolt and signals a trend, a retracement and the resumption of the trend. This pattern is also called the "ABC Wave" or 1-2-3 pattern by technical analysts.

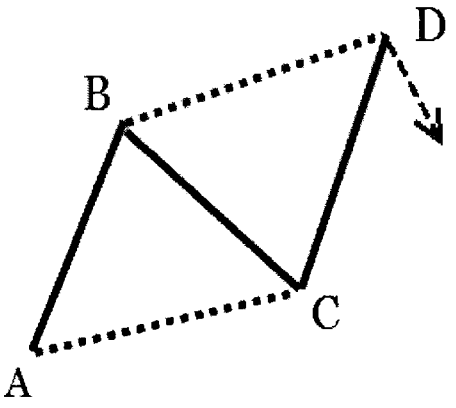
The "ABC" patterns forecast key market turning points and profit targets for traders. "ABC" patterns pinpoint important pivot levels with high and low prices and identify key trading zones.

The key point in identifying a "ABC" is correctly finding the A, B, and C pivot points in a chart. These key pivots are found using for various "pivot strength" levels, and for its correction waves. Once A, B, and C pivots are identified, an Auto-levels algorithm is applied to determine the confluence level "D". This area is called "Potential Reversal Zone" (PRZ).

The "C" pivot in "ABC" patterns are determined by the Fibonacci retracement of (38.2 to 61.8 percent) of AB swing. The projection from "C" level is measured using fib-ratios of AB and BC swings. Some traders use the confluence of these ratio levels as areas for profit taking.

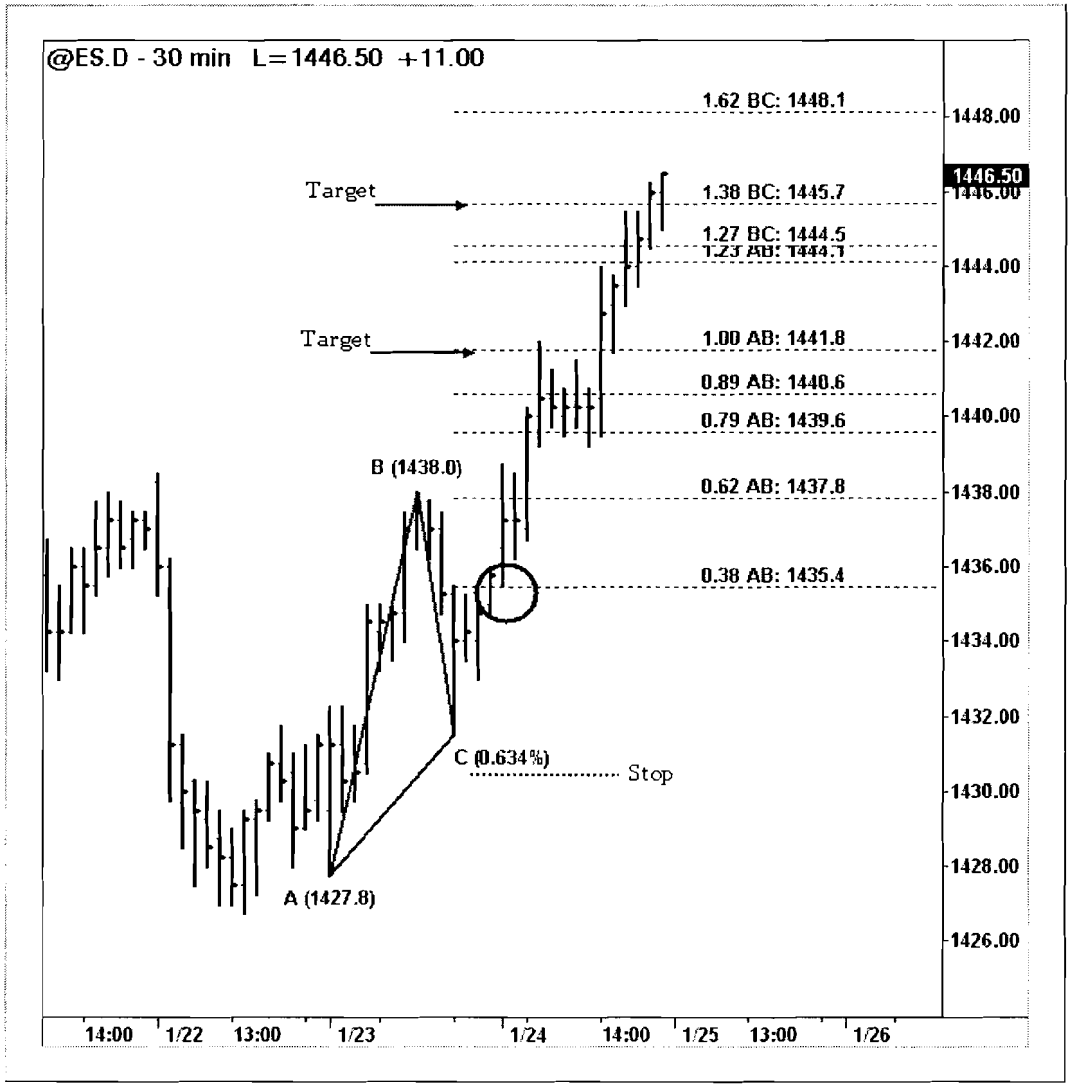


AC= 0.382 to 0.886 AB
BD =1.232 to 2.618 BC



AC= 0.382 to 0.886 AB
BD =1.232 to 2.618 BC

ABC Bullish Pattern



Trading an ABC Bullish Pattern

The example above shows an ABC pattern from the S&P Emini futures 30 minute chart. After formation of the AB swing, the "C" pivot point was expected around 62% of AB range. Price trading above the previous bar's high signaled a potential "long" trade.

1. Enter a "long" trade above the previous bar's "high."
2. Place a "stop" order below level "C."
3. Set "targets" at 100% of AB range and at 127% of BC range.

ABC Bearish Pattern

Trading an ABC Bearish Pattern

The example above illustrates an ABC Bearish reversal pattern in daily Gold futures chart. Gold made a 20-day swing high of 658 in December. During mid December, Gold reached a swing low of 621 (at B). At the beginning of January 2007, Gold retraced 78.6% of the AB level to another "swing high" at "C" to complete the ABC "bearish" pattern. A wide-range bar signaled a potential short trade.

1. Enter a "short" trade below the low of previous bar 631 (38% of the AB range).
2. Place a "stop" order above level C at 650.
3. Set "targets" at 100% of AB range (at 605) and 127 to 138% of BC range.

5.2. Gartley Pattern

Gartley Pattern

In 1932, H.M. Gartley described a 5-point "Gartley" trading pattern in his book, *Profits in the Stock Market*. Larry Pesavento has improved this pattern with Fibonacci ratios and established rules on how to trade the "Gartley" pattern in his book, *Fibonacci Ratios with Pattern Recognition.* There are many other authors who have worked on this pattern, but the best work to my knowledge is done by Scott Carney in his books of "Harmonic Trading".

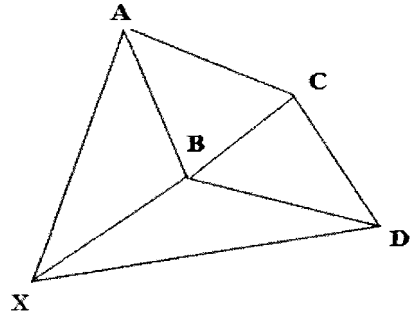
"Gartley" patterns have five points starting at point X, which is the lowest of all points in a bullish setup and the highest of all points in a bearish setup. For bullish Gartley, from X, prices rise to form a higher swing-high at "A". From A, a retracement swing low "B" is formed within 0.382 to 0.618 of XA range. Another swing high "C" is formed at 0.618 of AB. Point "D" is formed in Potential Reversal Zone (PRZ) within 0.618 to 0.786 of XA swing, or 1.27 to 1.62 of BC range. D is the decision or buy trade point in bullish "Gartley" setup. Point D is also a sell trade point in a bearish "Gartley" setup.

Trade: A confluence of Fib ratio levels is calculated to find a Potential Reversal Zone (PRZ). This is the area where Gartley pattern formations are anticipated for reversals and for potential trade entries. Trades are only placed after "D" formation and if the market makes a reversal bar (wide-range or higher-high) from the PRZ.

Target: The first set of targets are the price levels of C and A. The second target is set at extensions of 1.27 to 1.62 of AD range.

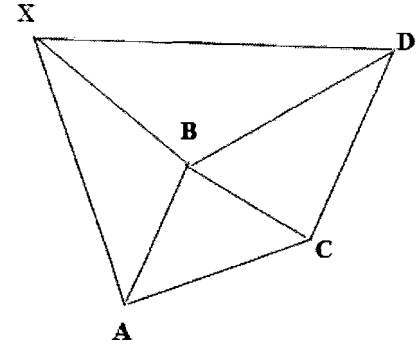
Stop: Once a trade is triggered, a "stop" is placed below D or below PRZ for "long" and above D for "short" trades.

Bullish Gartley



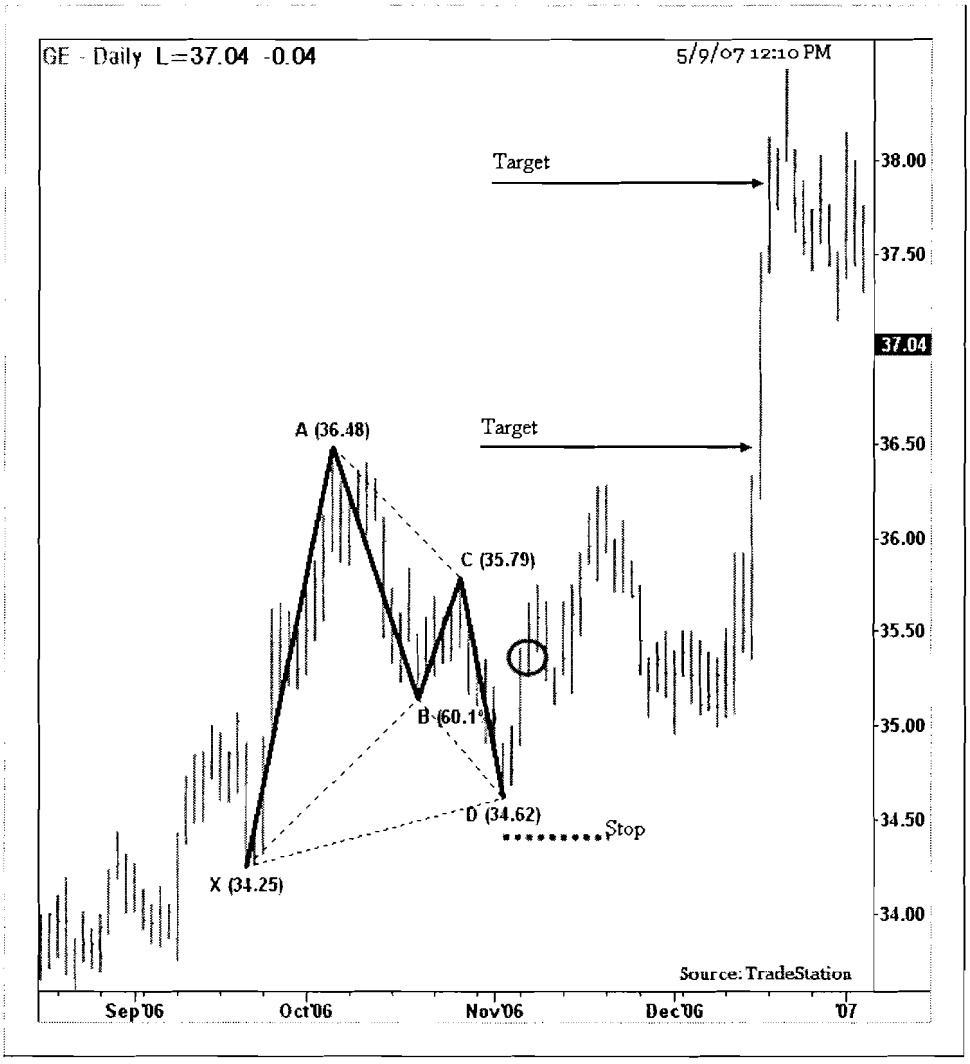
AB = 0.618 XA
AB = CD
AB = 0.382 - 0.886 XA
AD = 0.786 XA

Bearish Gartley



AB = 0.618 XA
AB = CD
AB = 0.382 - 0.886 XA
AD = 0.786 XA

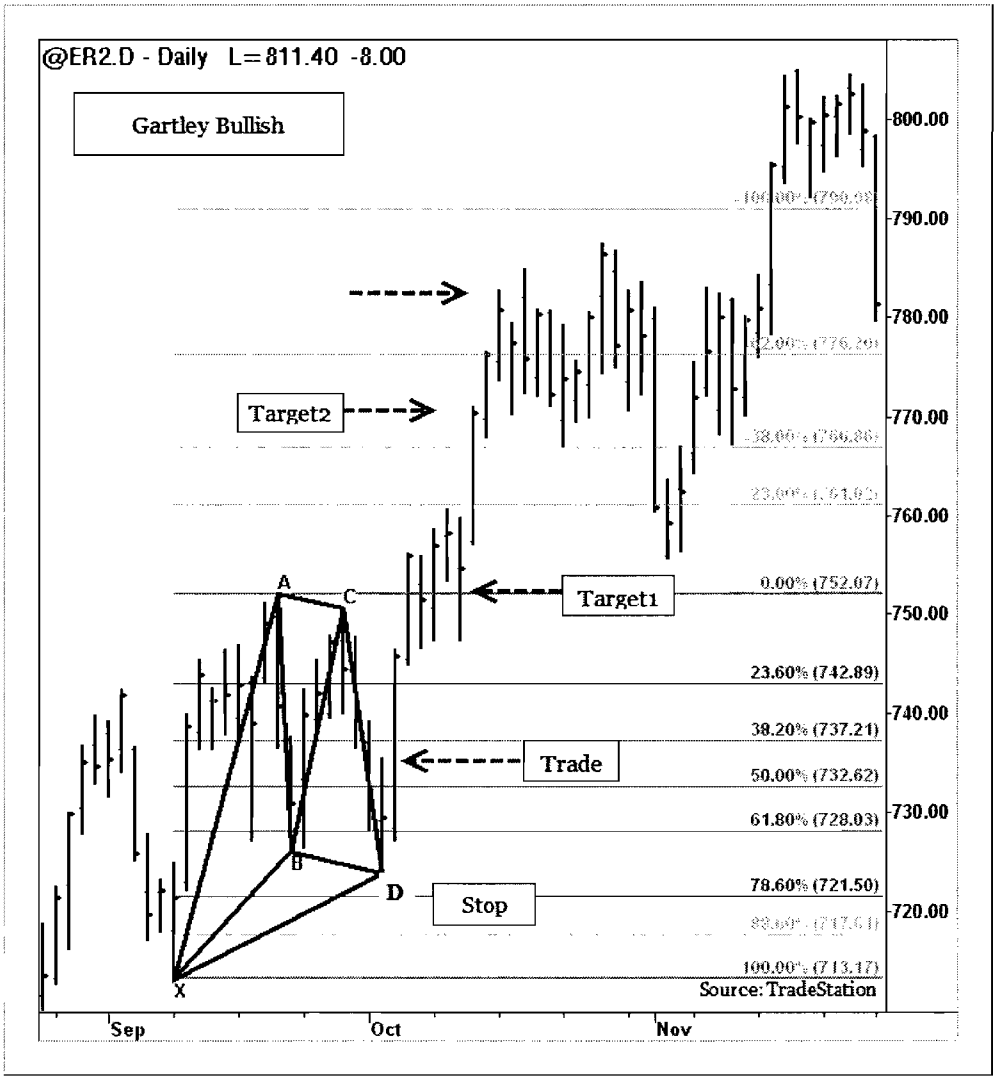
Trading Gartley Bullish Pattern



Trading Gartley Bullish Pattern

The example above shows a bullish "Gartley" formation from the daily GE stock chart. From mid September 2006 to November 2006, GE formed a "Gartley" formation. The B level retracement was 60.1% near the minimum of Gartley's requirement. The PRZ level was formed at 88.6% area at D. After D level, the price action is closely watched for a "long" trade entry. GE made higher-highs from D level suggesting a completion of the "Gartley" formation. A "long" entry is triggered at $35.35 area with a "stop" below D level at $34.30. Targets were placed first at the A level (at $36.48) and from 138% to 162% of XA range at $37.50.

Trading Gartley Bullish Pattern



Trading Gartley Bullish

The example above shows a bullish "Gartley" pattern from the Russell Emini (ER2) daily chart. After XA "swing," the B level was formed near 62% of XA. C swing was formed at 0.886 of AB range. The "Gartley" pattern is completed when AB=CD is formed at D.

1. After completion of D, a "long" trade is entered one-tick above previous bars' high.
2. A "stop" order was placed one tick below D level (PRZ).
3. Place a target at 127% of XA level around 770 level.

Trading Gartley Bearish Pattern

Trading Gartley Bearish Pattern

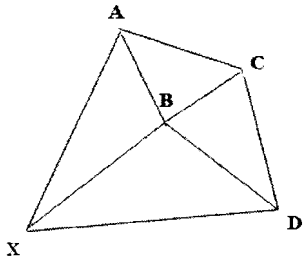
The example above shows a bearish "Gartley" pattern from the Dow Emini futures (YM) 5m chart. The B retracement was formed at 62% of XA swing. C swing point was formed with 0.786 of AB swing. The D level was formed at 0.886 of XA range with AB=CD confluence.

1. Enter a "short" trade one-tick below the previous bar's low at 'D'.
2. Place a "stop" order one tick above the "D" level.
3. Place "targets" at "A" level and at 1.62 of AD range.

Bat and Gartley Comparison

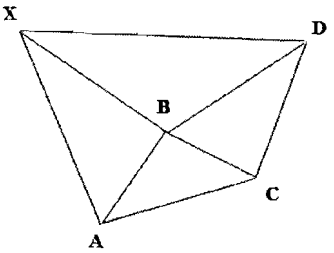
Bat and Gartley

Bullish Bat



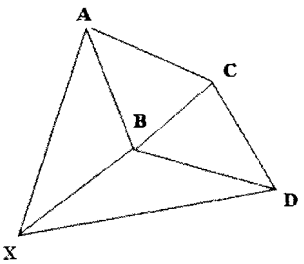
AB = 0.50 XA
AB = CD
AB = 0.50 - 0.62 XA
AD = 0.886 XA

Bearish Bat



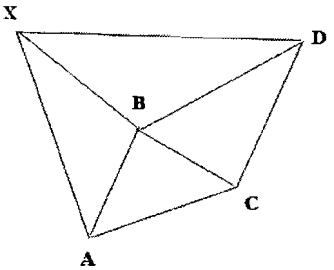
AB = 0.50 XA
AB = CD
AB = 0.50 - 0.62 XA
AD = 0.886 XA

Bullish Gartley



AB = 0.618 XA
AB = CD
AB = 0.382 - 0.886 XA
AD = 0.786 XA

Bearish Gartley



AB = 0.618 XA
AB = CD
AB = 0.382 - 0.886 XA
AD = 0.786 XA

5.3. Bat Pattern

Bat Pattern

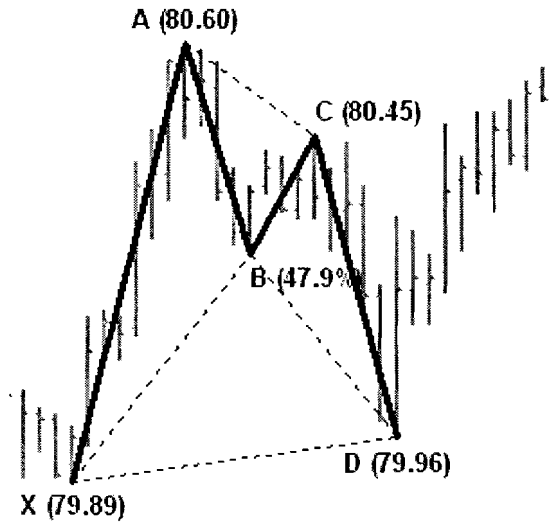
The Bat pattern was discovered by Scott Carney of Harmonic Trading in 2001. The Bat pattern is in the same family of Gartley's 5-point corrective patterns, but has distinct harmonic ratios. Bat pattern incorporates a precise harmonic ratio (0.886 of XA swing). It also demands that the B (center) retracement should be less than 0.618 of XA swing. The B retracement differentiates between the Gartley and Bat patterns. The Gartley pattern must have a 61.8% retracement of XA swing, and in Bat patterns have the same XA swing retracement below 61.8% at "B".

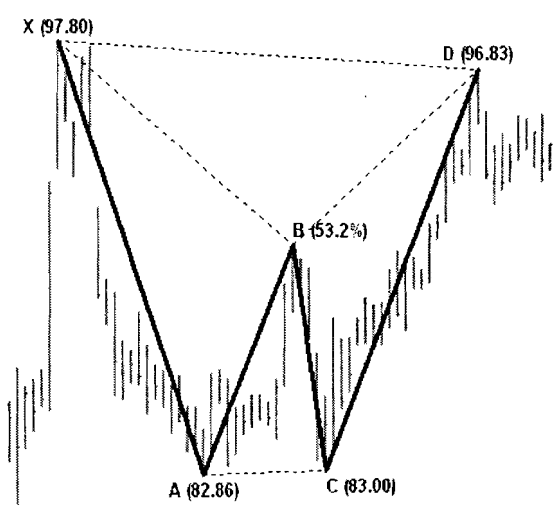
The Bat pattern's Potential Reversal Zone (PRZ) is defined by 1.27AB=CD pattern, 1.62BC, 0.886 XA retracement levels. In bullish or bearish Bat patterns, a reversal from PRZ is anticipated for a potential long and short entry trades.

Trade: Once the Bat pattern is completed, wait for a higher-high bar or wide range bar to give a signal to enter a long trade. Enter a "long" trade one tick above the high of the confirmation (higher-high or wide range) bar. For bearish patterns, enter a "short" trade one tick below the low of the lower-low or wide-range bar.

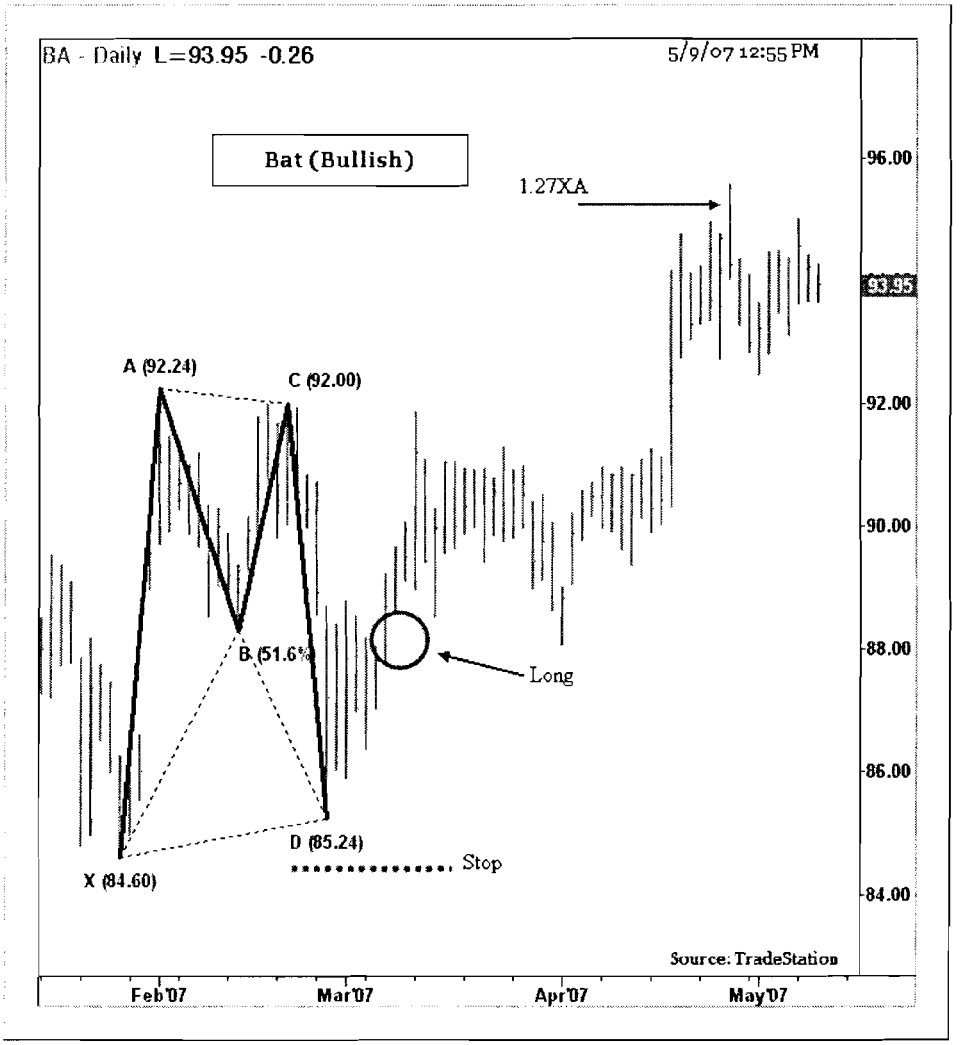
Target: The target for the Bat patterns is similar to the Gartley patterns. First targets may be set at A level or 1.27 of XA swing. The secondary targets could be 1.62 to 2.0 of XA swing level.

Stop: The Bat pattern fails if price trades below the X level. Place a stop order one tick below X level.





Trading Bullish Bat

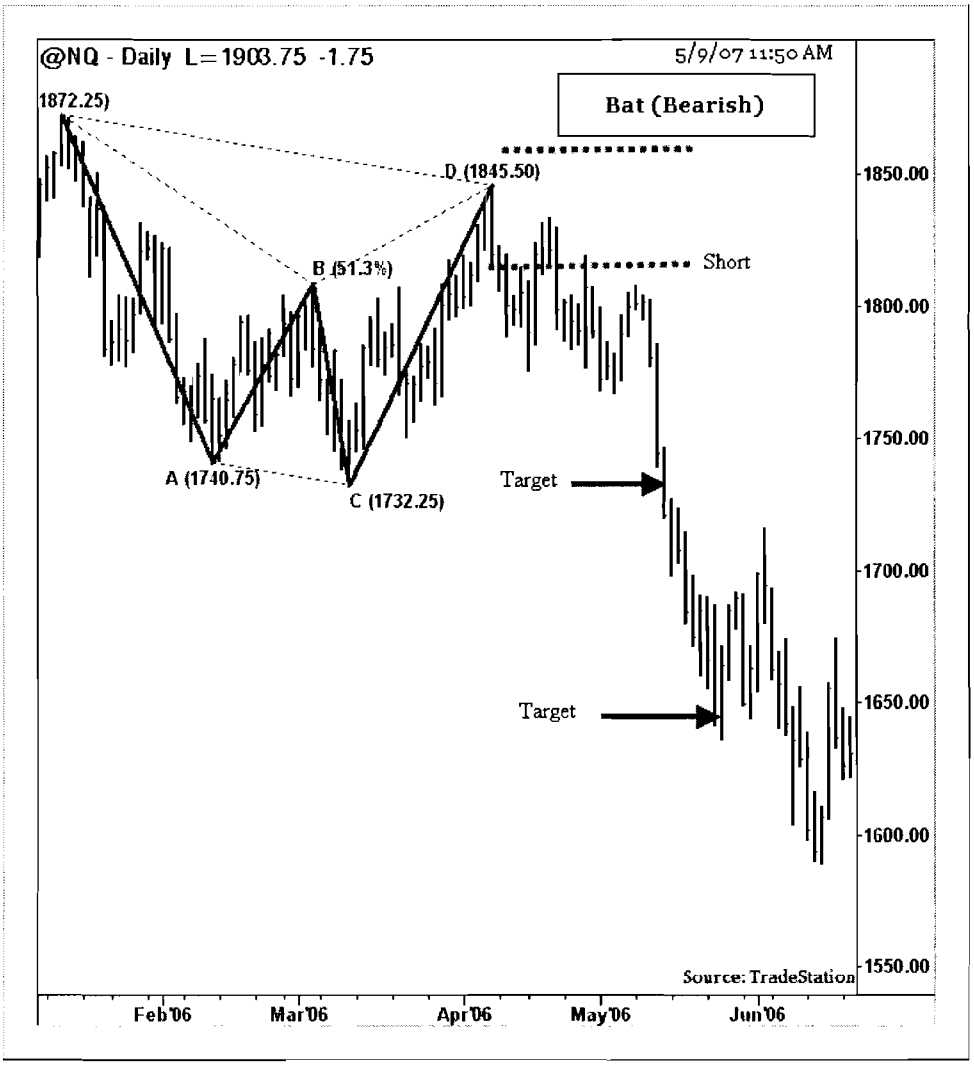


Trading Bullish Bat

The example above shows a bullish Bat formation from Boeing's daily chart. Boeing formed a bullish Bat formation from mid January 2007 to March 2007. After XA swing, a 51.6% retracement is marked for "B" level. A Potential Reversal Zone (PRZ) is computed at 0.886 of XA, 1.62 of BC and 1.27 of BC range. After a series of "higher high" bars, Boeing stock reversed its prices from PRZ (at D). A "long" trade is triggered above the B level.

1. Enter a "long" trade above B level at $88.
2. Place a "stop" order below the low of D at $84.60.
3. Place a "Target" 1.27 of XA level at $94.

Trading Bearish Bat



Trading Bearish Bat

The example above shows a bearish Bat formation from the NASDAQ futures (NQ) chart. NASDAQ futures formed a bearish Bat from January to April in 2006 from the range of 1872 to 1845. The B retracement level was at 51.3% confirming the Bat pattern. The D level was formed at 0.886 of XA range. A PRZ was computed from 1845 to 1853 levels for a reversal at D. Once prices traded inside the PRZ, a reversal bar is anticipated to signal a "short" trade.

1. Enter a "short" trade below the low of the reversal bar at D level (1820).
2. Place a "stop" order above the D level 1847.
3. Place "targets at "A" level and at 1.62 of XA swing at 1660.

5.4. Butterfly Pattern

Butterfly Pattern

The "Butterfly" pattern was discovered by Bryce Gilmore and Larry Pesavento. It is one of the powerful patterns like the Gartley pattern. The "Butterfly" pattern has a distinct retracement level (0.786) of XA swing. In bullish and bearish 5-point swings, the pattern must have 0.786 to 0.886 of XA swing to be valid. In perfect "Butterfly" patterns, the AB swing will be equal to CD (AB=CD).

"Butterfly" patterns usually occurs at market tops and market bottoms. The pattern's success rate is much higher when the retracement and time ratios are harmonically aligned.

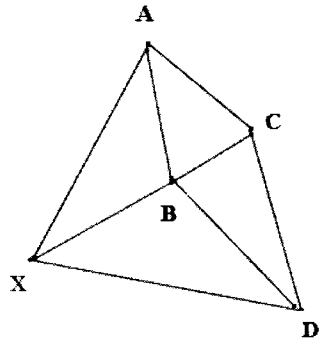
Two primary differences between the "Butterfly" and "Crab" patterns are: 1). The AB retracement must be 0.786 in the "Butterfly" pattern; where as in the "Crab" pattern, it lies between 0.382 and 0.618.2 levels 2). In both patterns the D point extends beyond the X and the C level can be inside or outside of the XA range. The retracement of AB defines level D. In Butterfly patterns, if B is formed at 0.786, the usual retracement of D could be near 1.27 of XA range.

Trade: Once the Butterfly pattern is completed in PRZ level, wait for a confirmation bar, wide range bar or "higher high" close bar to suggest a potential reversal from "D" level. Enter one tick above the high of the confirmation bar.

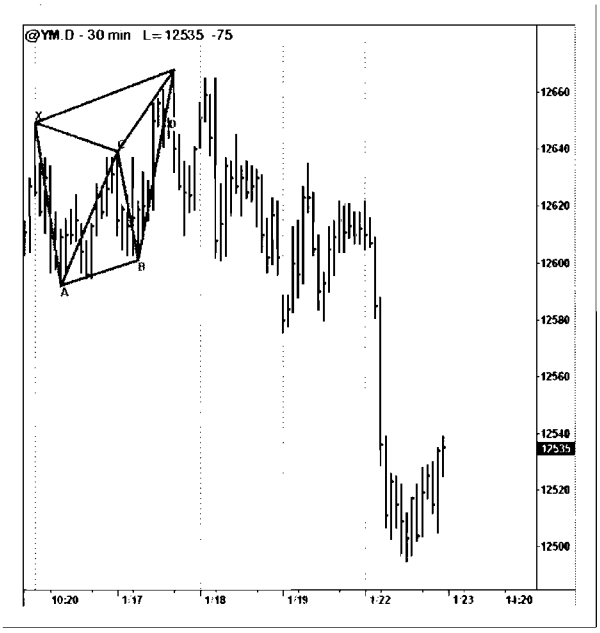
Stop: Place a "stop" order below (bullish) the low of the "Butterfly" pattern. For bearish Butterfly patterns, place a "stop" order above the high of the "Butterfly" pattern.

Target: Targets are set at 100% of AD and 162% of XA from D levels. In bullish butterfly patterns, beyond the A level, targets need to be protected with trailing stops.

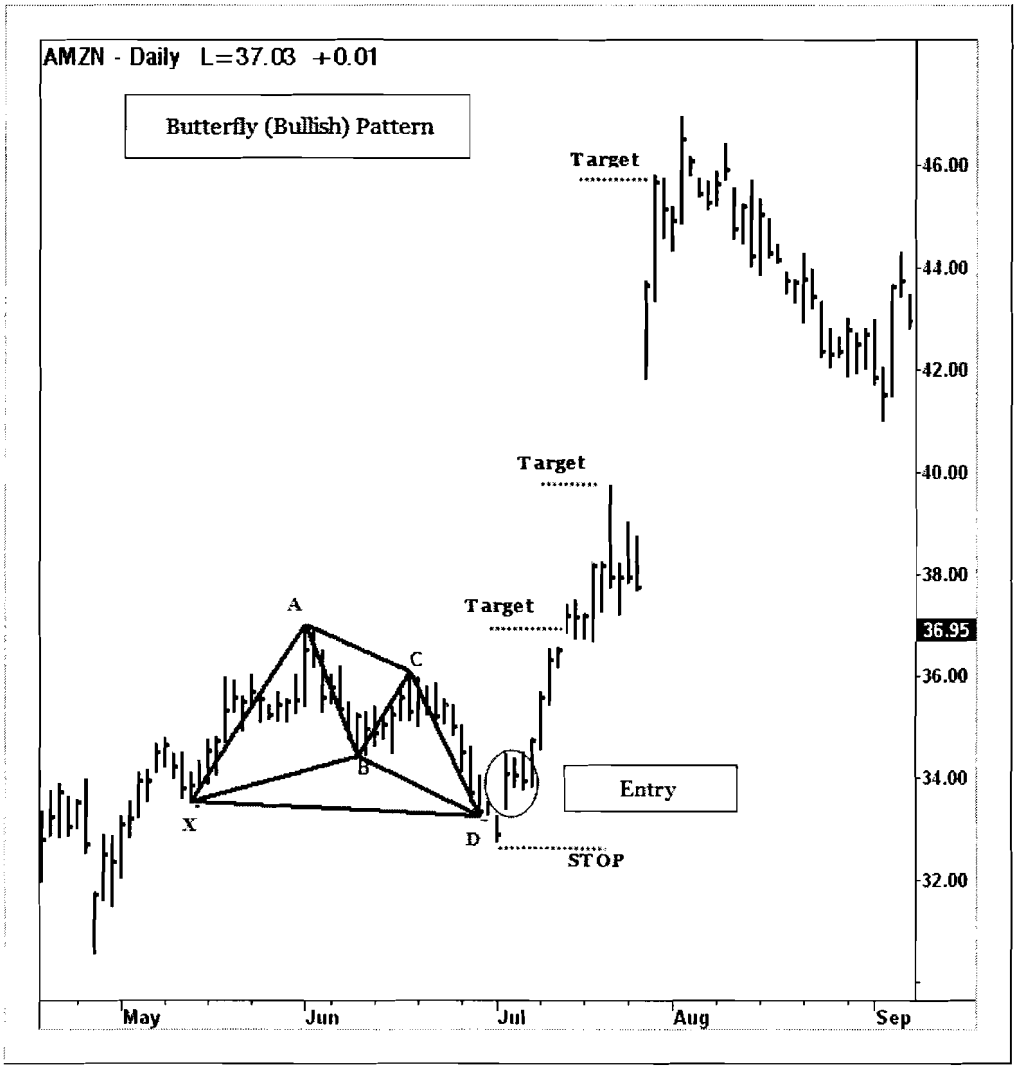
Bullish Butterfly



AB = 0.786 XA
BC = 0.382-0.886 AB
XD = 1.27 XA



Trading Butterfly Bullish

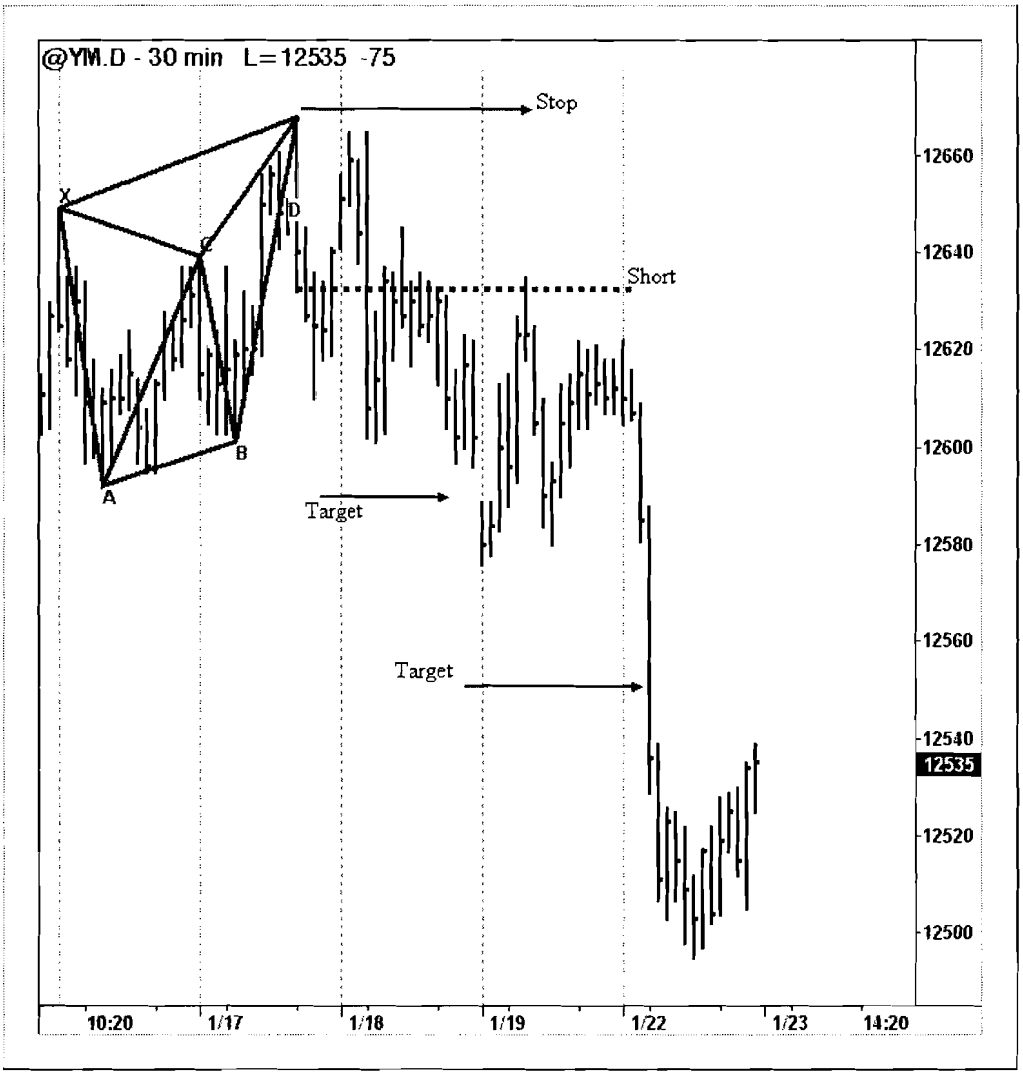


Trading Bullish Butterfly Pattern

The example above illustrates a bullish "Butterfly" pattern from Amazon's daily chart. From the "swing low" of X to the "swing high" of A, the center of Butterfly level B is formed when prices retrace to 0.786 of XA was made. A retracement of 0.618 of AB retracement is made at C. D is formed with in the Potential Reversal Zone at 1.27 of AB. A "long" trade is triggered from D level as a wide-range bar traded above the previous bar's high.

1. Enter a "long" trade one tick above the previous bar's high.
2. Place a "stop" order below the low of D level.
3. The first target is set at "A" level and second target is set at 162% of XA swing.

Trading Butterfly Bearish



Trading Bearish Butterfly Pattern

The example above illustrates a bearish "Butterfly" pattern from the Dow Emini futures (YM) 30 minute chart. YM formed a bearish "Butterfly" pattern from January 16, 2007 to January 17, 2007 between the 12500 to 12660 levels. After completion of D level at 12260, a reversal bar (wide range bar or lower-low bar) is anticipated to signal a "short" trade.

1. Enter a "short" trade below the low of the reversal bar at 12630.
2. Place a "stop" order above the high of the D level at 12665.
3. Place "targets" at "A" level (12590) and another at 1.62 of XA swing (at 12550).

5.5. Crab Pattern

Crab Pattern

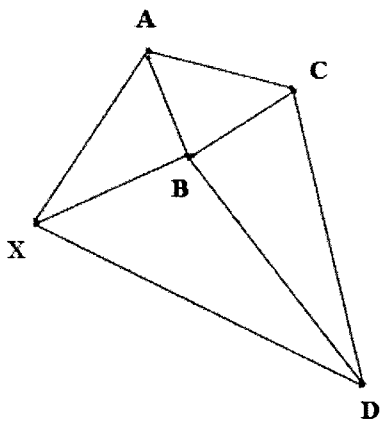
The "Crab" pattern was invented by Scott Carney of Harmonic Trading in 2000. The Crab pattern is another form of the 5-point Gartley extension pattern. The Crab pattern has a distinct extension: 1.62 of XA swing. Crab patterns also have a 0.618 XA retracement to form the center retracement "B" level. The Potential Reversal Zone (PRZ) is formed at 1.27 of AB swings, 1.62 of XA and a distinct 2.62 to 3.62 of BC. These extension patterns form when prices trade outside of XA swing. When the price closes below X, the pattern may be signaling a further correction to 1.62 of XA level to form "Crab" pattern.

Trade: Once the Crab pattern is completed at the PRZ level, look for price-action to confirm the reversal. For bullish Crab patterns, look for a "wide range bar" or "higher highs" from the PRZ level to confirm the Crab pattern. Enter a "long" trade above the confirmation bar. For bearish Crab patterns, enter a "short" trade below the low of the confirmation (lower low) bar.

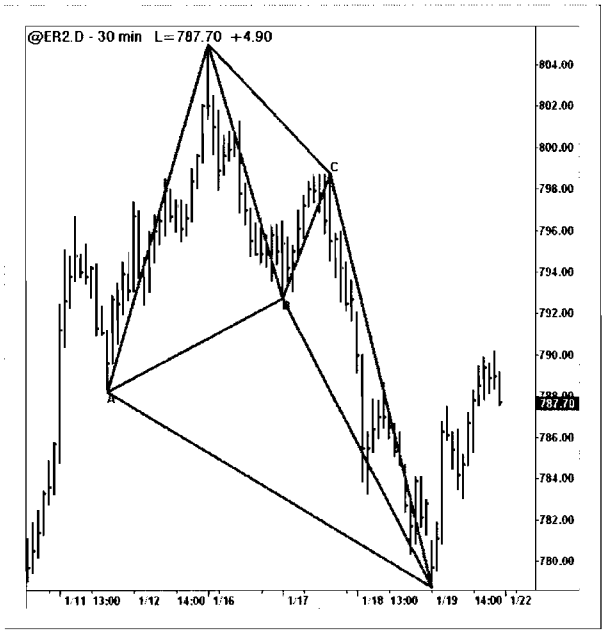
Stop: The bullish Crab pattern fails if prices close below the PRZ levels. Place a "stop" order below the low of the PRZ level. For bearish Crab patterns, place a "stop" order above the high of the PRZ levels.

Target: The bullish Crab patterns result in excellent profits. Set targets at "B", "C" and "A" levels. Similarly, for the bearish Crab patterns set targets at "B", "C" and "A" levels.

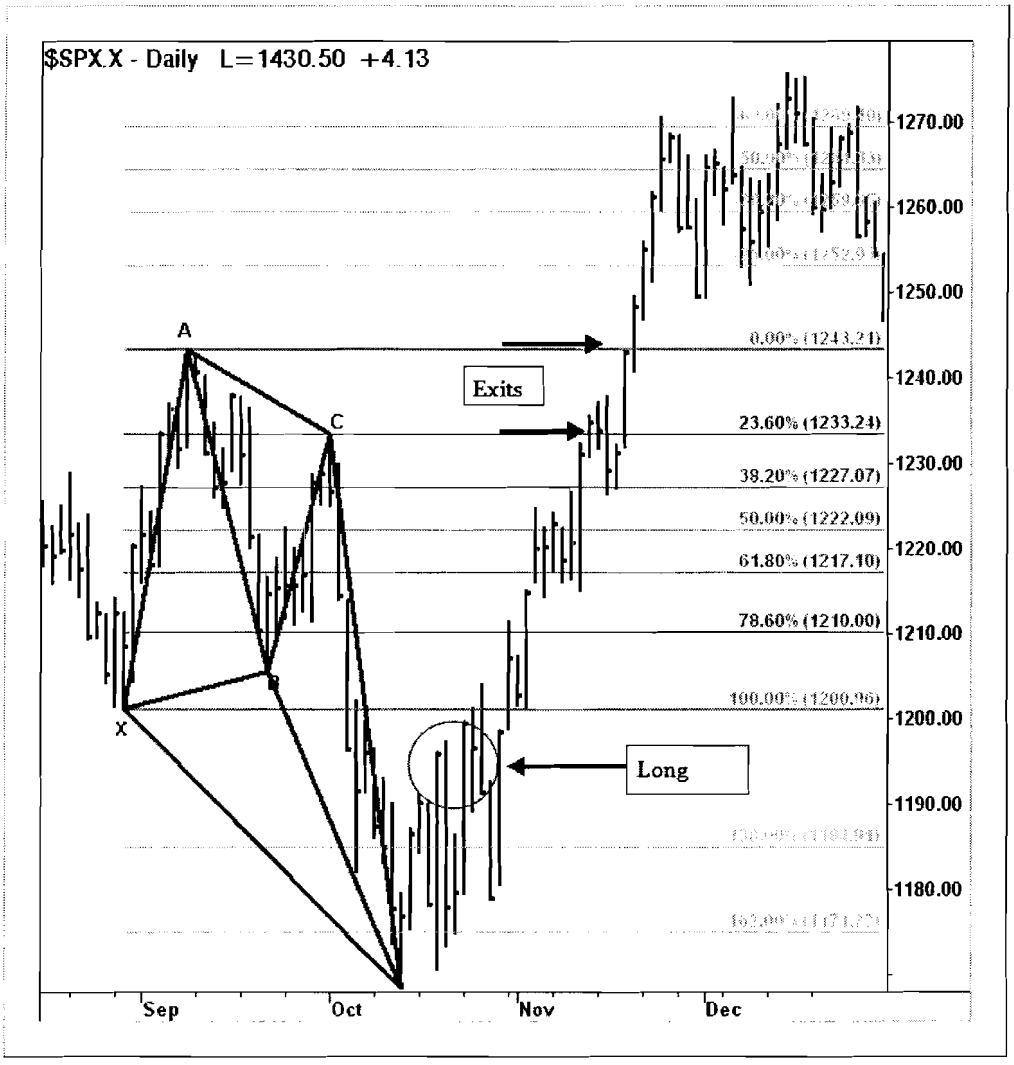
Bullish Crab



AB = 0.618 XA
XD = 1.618 XA
BD = 2.28-3.14 XA



Trading Crab Bullish Pattern

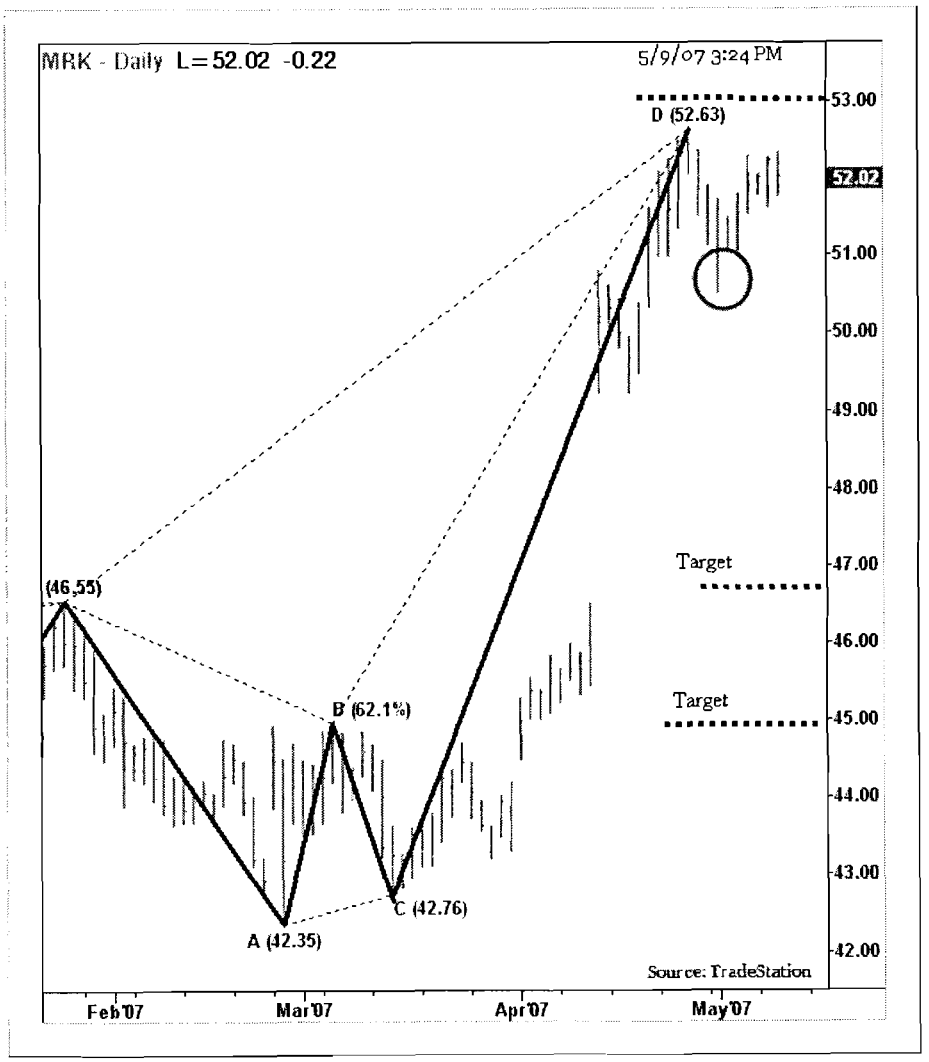


Trading Crab Bullish Pattern

The above example illustrates a bullish Crab pattern from the S & P 500 index (SPX) daily chart. From September 2005 to October 2005, SPX formed a bullish Crab pattern. Prices traded from a high of 1243 to 1172. In October 2005, SPX completed the Crab pattern as prices reversed to confirm the pattern. A wide-range bar at 1195 level confirmed the price reversals.

1. Enter a "long" trade above the confirmation bars' high at 1196.
2. Place a "stop" order below the low of the Crab pattern at 1171.
3. Targets are set at "C" level at 1233 and at "A" level at 1243.

Trading Crab Bearish Pattern



Trading Bearish Crab Pattern

The example above illustrates a bearish Crab pattern from Merck's (MRK) daily chart. MRK formed a bearish Crab pattern as it rallied from $43 to $53 from February 2007 to May 2007. After completion of the PRZ at "D" level, a reversal bar from the PRZ confirmed the completion of the Crab pattern. A "short" trade is triggered at the $51 level.

1. Enter a "short" trade below the low of the confirmation bar at $51.
2. Place a "stop" order above the high of the "D" level at $52.75.
3. Targets are set at "X" level at $47. The second target is set at "B" level at $45.

Chapter 6: Geometric Patterns

6.1. Triangles

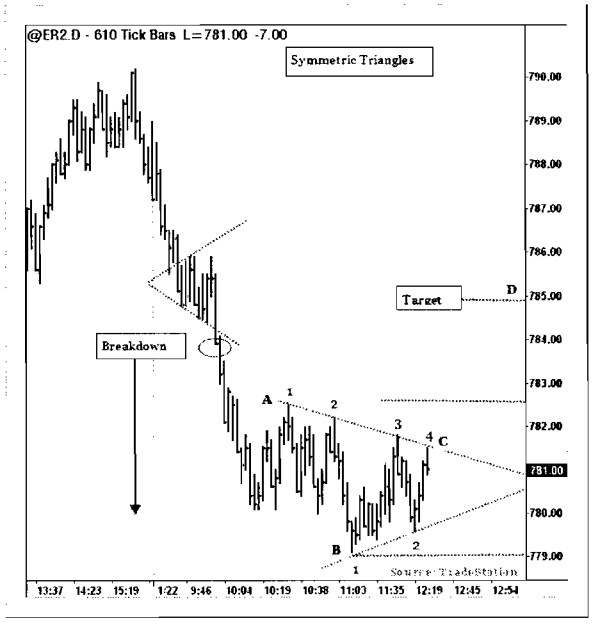
Symmetric Triangle

"Symmetric Triangles" form when the markets are in indecision mode. The "Symmetric triangles" can be easily detected when prices make alternate "lower highs" and "higher lows" in upside and downside slopes defining a symmetry. "Symmetric" triangles form when supply and demand are near equal resulting in market indecision. Most triangles result in a clear breakout and breakdown in the direction of the prior trend.

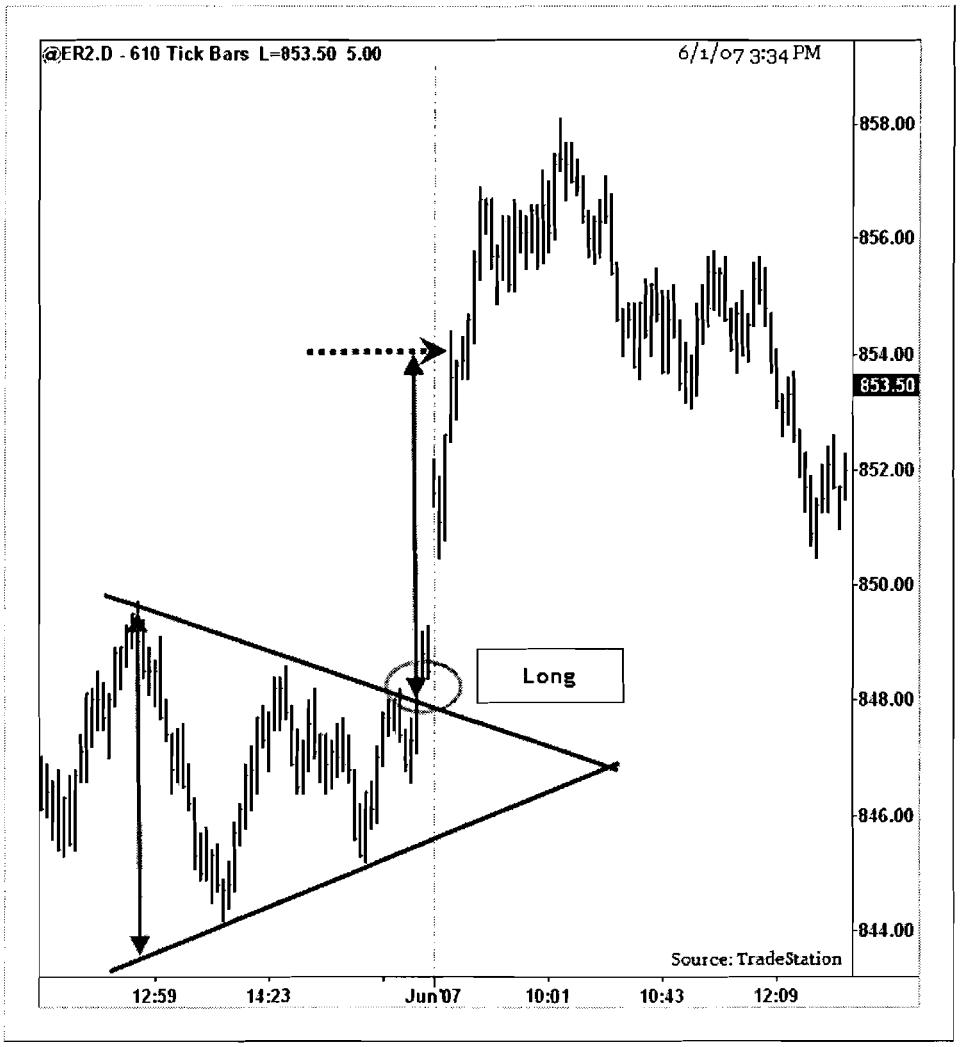
Trade:
Trades are only initiated at the trend line breakouts of the "Triangle." Enter trades only when "Symmetric triangle" breakouts/breakdowns are confirmed by price trading one or two ticks above/below the breakout/breakdown bar's high/low.

Target:
Most "Symmetric triangles" result in 100% of the depth rise/fall of the entire triangle range in the direction of the breakout. Partial trade exit targets are set at 50% of the depth from the trade entry. Protect targets by using trail stops.

Stop:
"Symmetric triangle" failures occur when price results in false breakouts. Stop below the first major "swing low" below the trend line for a long setup. Place a "stop" order above the first major swing high from the trend line for a short-setup.



Trading Symmetric Triangle



Trading Symmetric Triangle

The example above shows a "Symmetric triangle" formation from the Russell Emini (ER2) 610 tick chart. On May 31, 2007, ER2 made lower highs and higher lows to form a "Symmetric triangle." Late afternoon, ER2 prices rallied and closed above the top trendline to confirm a "Symmetric triangle". On the following day, ER2 traded higher from the breakout to reach the target levels.

1. Enter a "long" trade above the high of the breakout bar at 848.5
2. Place a "stop" order below the low of the previous swing low at 845.
3. Target the depth of the triangle from the breakout level to 853.

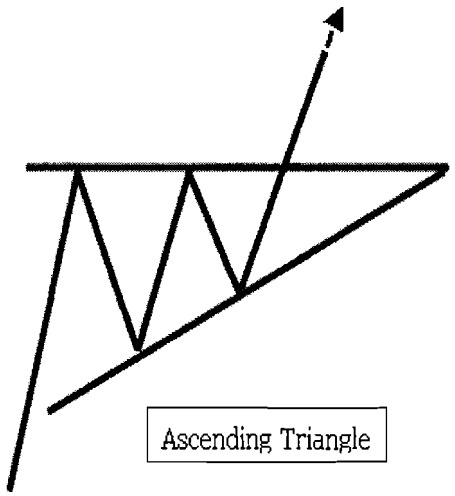
Ascending Triangle

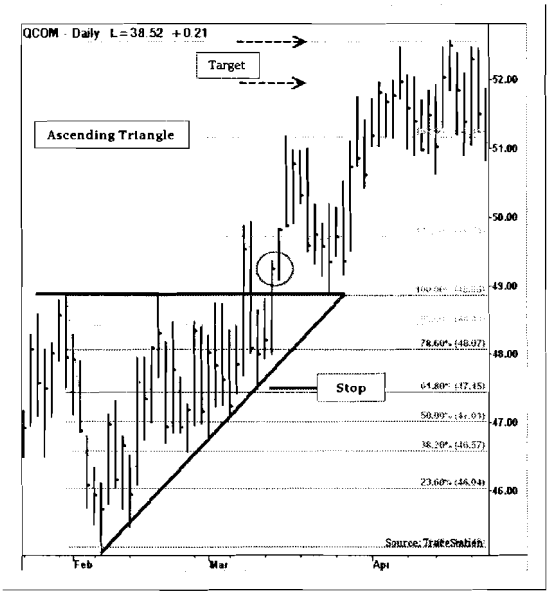
"Ascending Triangles" form when prices attempt to make "higher highs" and "lower lows" suggesting a bullish price trend. The "Ascending triangle" is bound by two trendlines: a horizontal line at the top and an upward slope trend line connecting the lower lows. "Ascending triangles" form in any market and are quite reliable. The "Triangle" prices must intersect the trend lines at least twice (each) before the pattern is complete. Usually at the third or fourth attempt to trade outside the top trend line results in a breakout. Breakouts occur near the apex of the triangle. This pattern has a high success rate as it meets its target about 75% of the time.

Trade:
Trade a clear breakout of the top trend line. Enter a "long" trade one tick above the high of the breakout bar. Confirm the breakout by volume or other indicators.

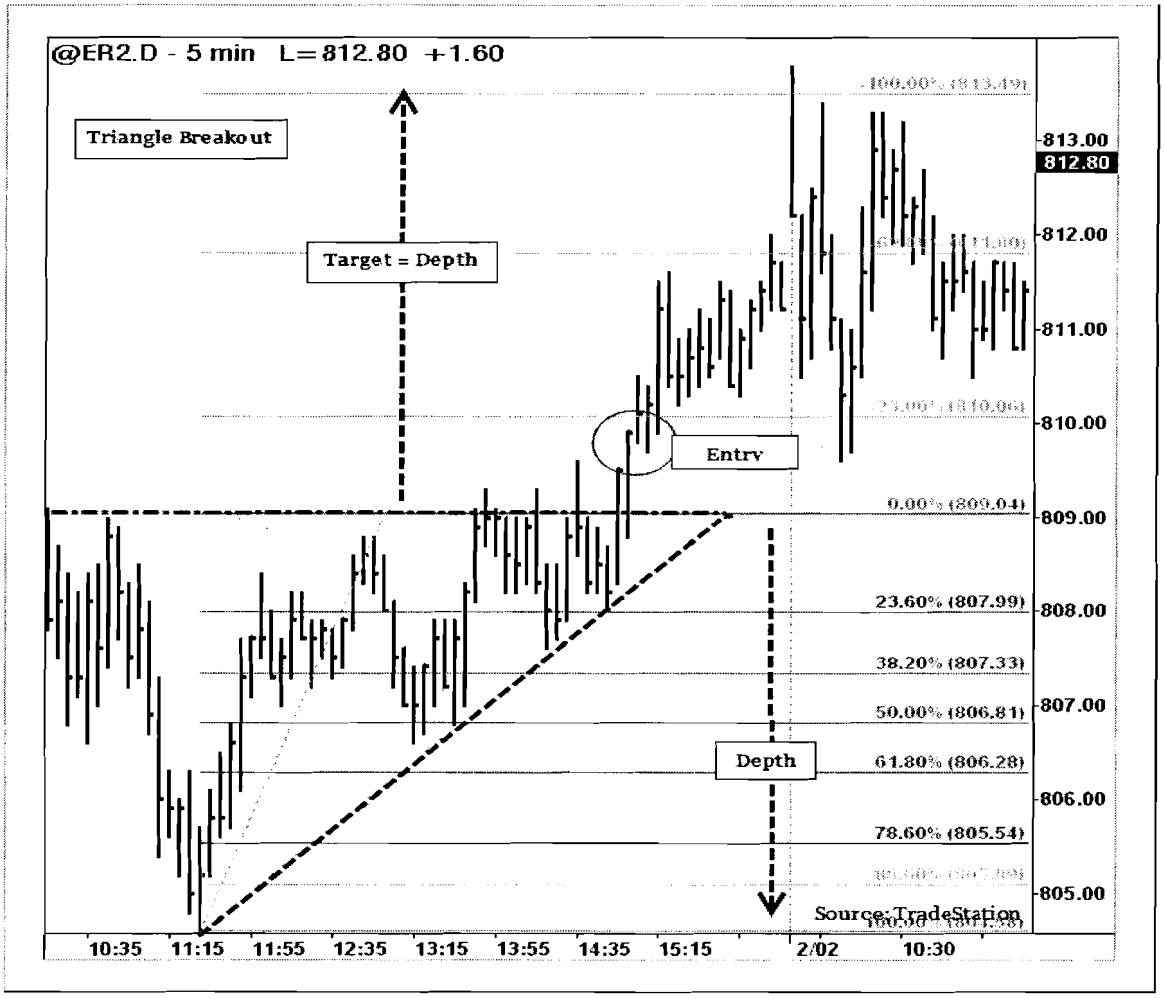
Target:
"Ascending triangles" have excellent success in reaching target areas. The usual target would be the depth of the "Triangle". Measure the distance (depth) between the top trend line and lowest of the upward slope trend line. Add this depth to the breakout point from the top of the trend line. Targets are also set at 50% of depth level for partial exits.

Stop: Place a "stop" order when the price closes below the low of the lower trend line or a major swing low.





Trading Ascending Triangle



Trading Ascending Triangle

The above example shows an "Ascending triangle" from the Russell Emini (ER2) 5 minute chart. On February 01, 2007, at around 2.30 pm, after few failed breakout attempts, the price closed outside the upper trend line. A trade is triggered above the high of the breakout bar at 809.6. A "stop" order is placed below the low of the last "swing low" at 808. The depth of the triangle is 4 points. Targets are set for 50% of depth (2 points) at 812 and 100% of the depth at 813.

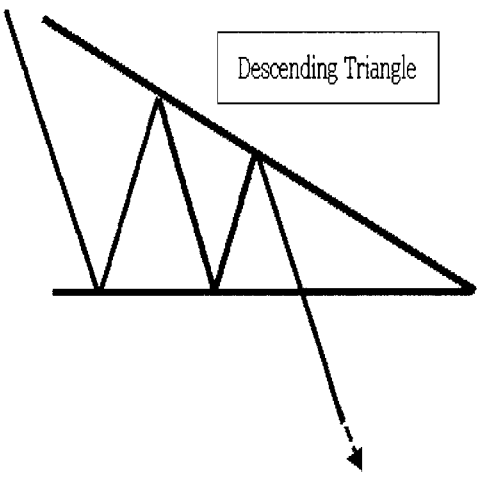
Descending Triangle

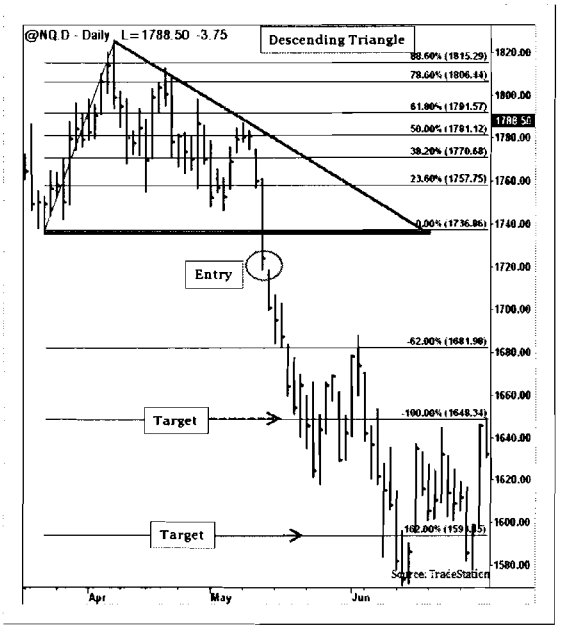
"Descending Triangles" are similar to "Ascending Triangles" formation rules except they are bearish. "Descending triangles" form in bear markets and favor breakdowns. A "descending" triangle is bound by two trend lines connecting a downward slope trend line and a flat trend line connecting the lows of the pattern. Trades usually occur near the apex as the price closes outside the bottom trend line suggesting a breakdown. The price must intersect trend lines at least twice before the pattern emerges. Like the Ascending triangles, "Descending Triangles" also have a high success rate.

Trade:
Trade one tick below the low of the breakdown bar (outside of the triangle). Confirm the breakdown with increased volume.

Target:
"Descending" triangles have similar targets like "Ascending" triangles. Measure "Triangle" depth at the lowest and highest points and set targets at 50% and 100% range from the breakdown point.

Stop:
Place a "stop" order outside the downward slope trend line. If price closes above the top trend line, exit the trade.





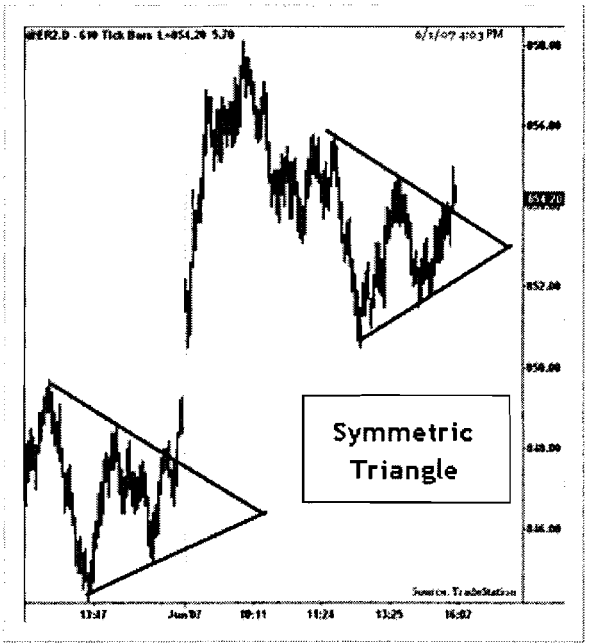
Trading Descending Triangle

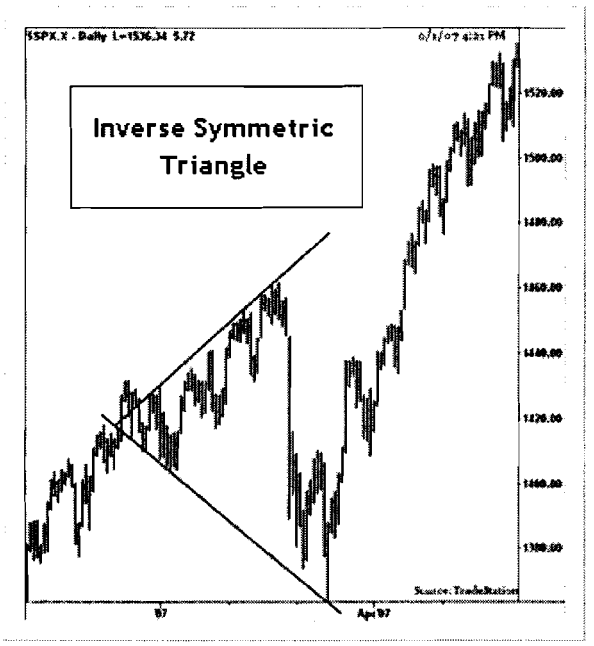
Trading Descending Triangle

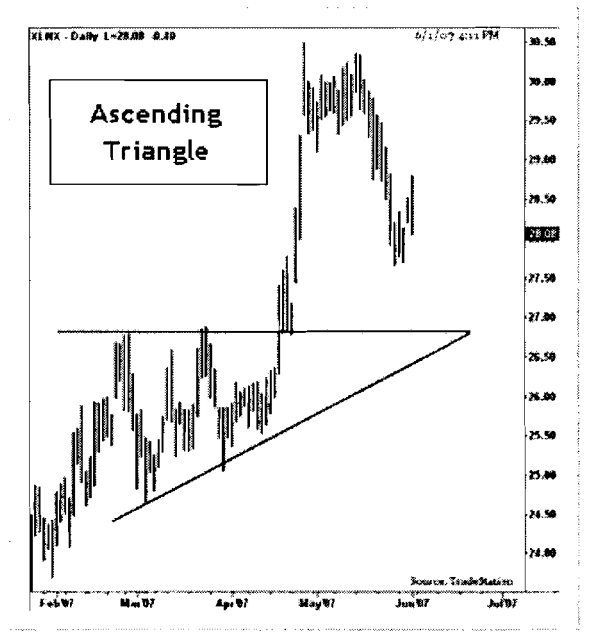
The above example illustrates a "Descending triangle" from the daily Gold futures chart. In July 2006, Gold reached 700 and retraced to 620 by the mid of July. Gold made a series of lower highs and a flat bottom near the 620 level to form a "Descending Triangle". During the first week of September, Gold closed below 620 to trigger a sell-off. The depth of the "Triangle" was 80 (700 to 620) points.

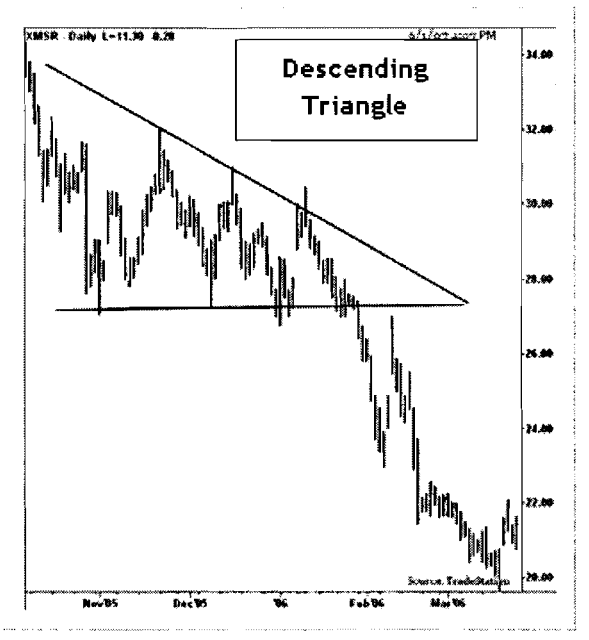
1. A "short" trade was entered at 618 with target of 570.
2. A "stop" order was placed above the trend line at the 640 level.
3. A 50% depth target area can be seen from the trade entry.
    1.

Triangle Types









6.2. Rectangle Pattern

Rectangle Pattern

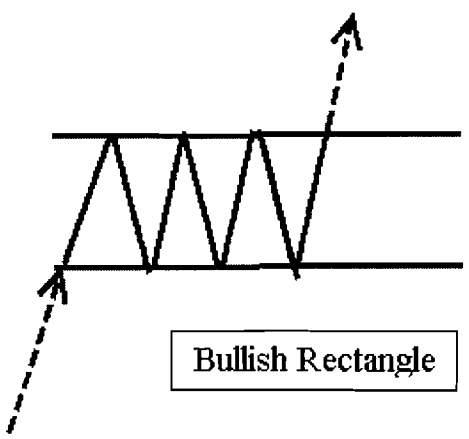
"Rectangle" patterns are continuation patterns showing indecision in trader's sentiment about bullish and bearish conditions. "Rectangle" patterns are reliable patterns and the direction of the breakout/breakdown is known prior to the rectangle formation. These patterns are continuous and follow in the same prior direction (Up or Down) after the pattern formation.

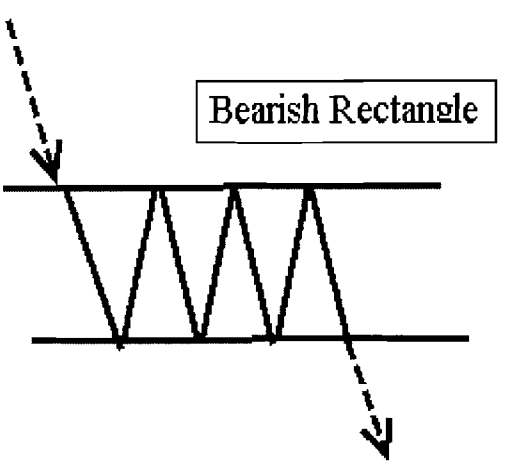
"Rectangle" formations are bound by two horizontal trend lines, where prices oscillate between the "highs" and "lows." The prices must intersect these trend lines at least twice before a breakout or breakdown can result. The volume within the pattern is usually quiet and increases during the breakout/breakdown stages.

Trade:
A trade setup occurs when a price closes outside the trend line after at least two penetrations on each side of the boundaries. Trades are entered on a follow-up bar at "high" above the breakout bar or "low" below the breakdown bar.

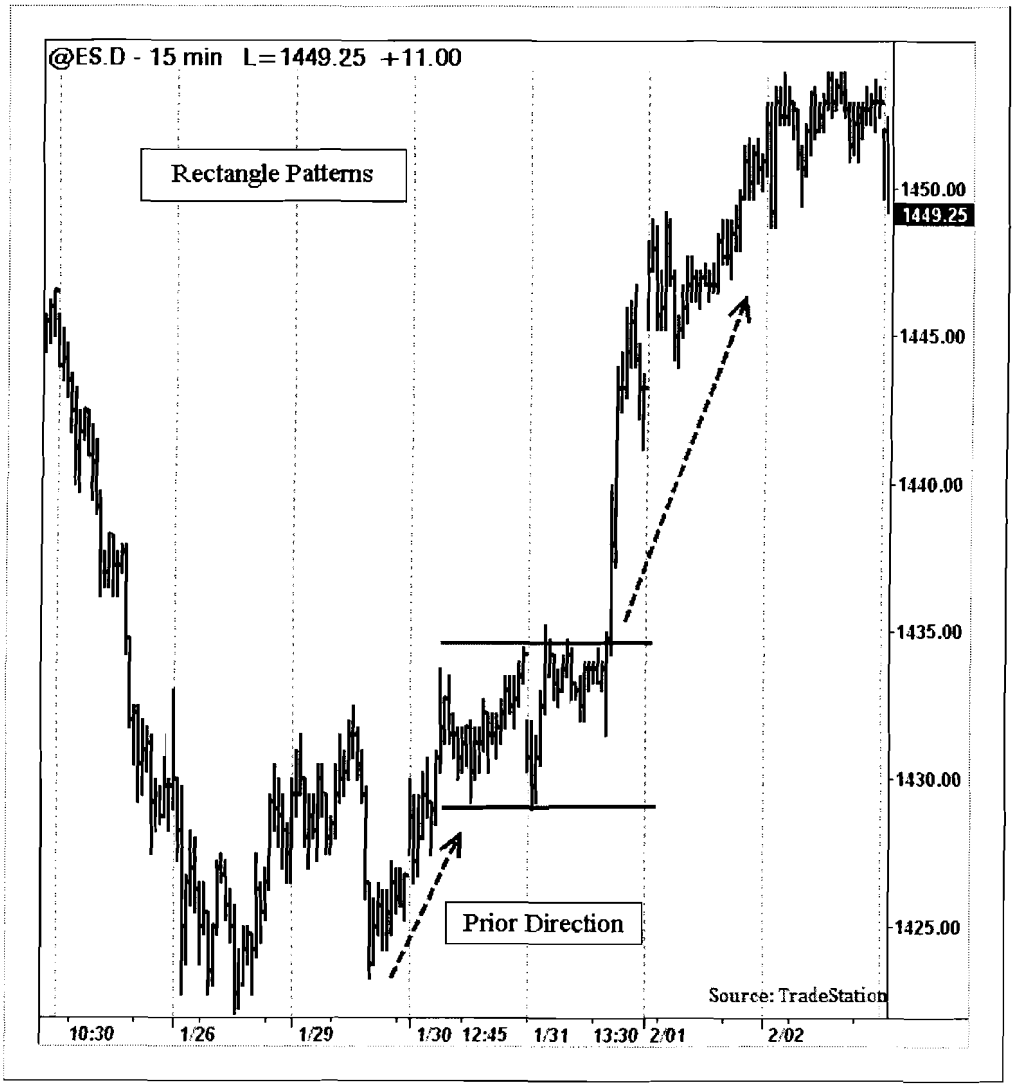
Target:
Targets in "Rectangle" formations are based on the depth of the rectangle pattern. The pattern is reliable, and targets are usually set at 70 to 100% of the depth of rectangle from the trade entry.

Stop:
Rectangle patterns fail when prices retrace in to the middle of the rectangle channel. Place a "stop" order just below/above the middle of the channel.





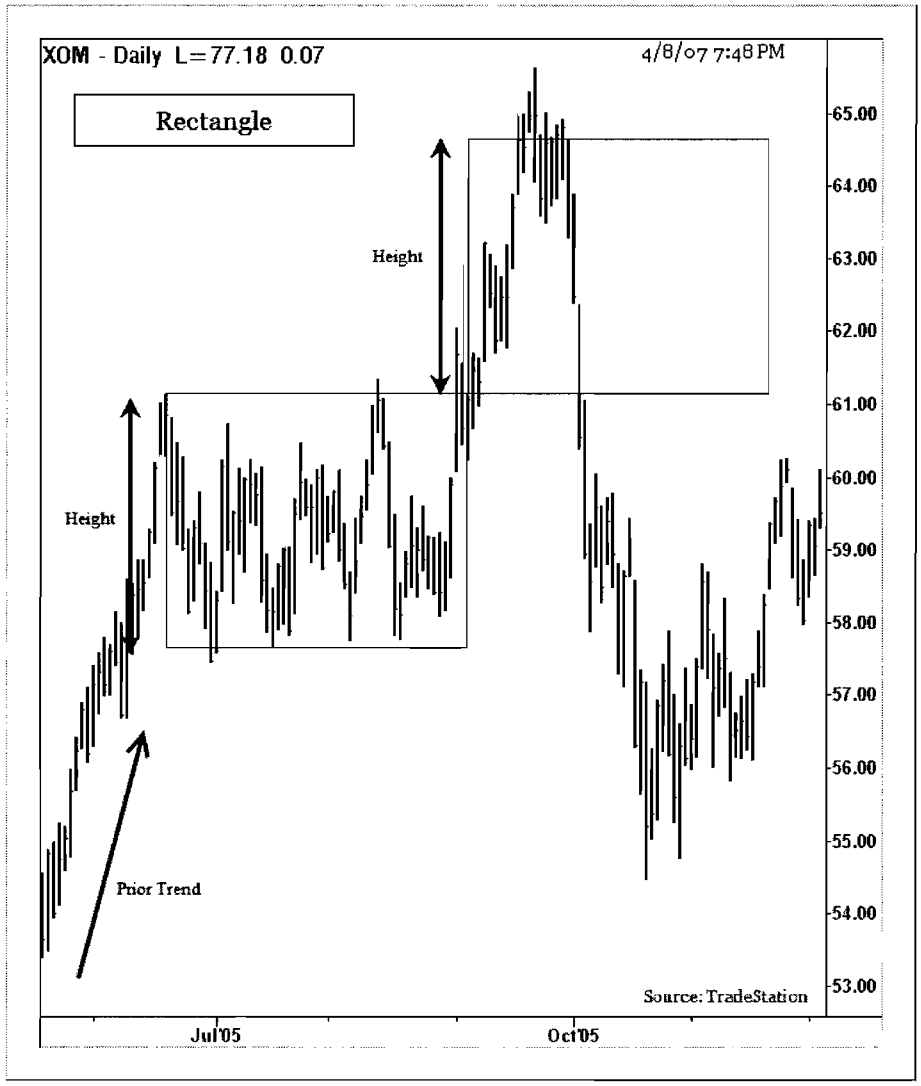
Trading Rectangle Patterns



Trading Rectangle Pattern

The example above illustrates a "Rectangle" pattern from the S&P futures (ES) 15 minute chart. On January 30, ES traded in a tight rectangle channel with highs and lows bound by two parallel trend lines. On the following day, prices traded outside the trend channel suggesting a breakout at 1437. The prior direction before the "Rectangle" formation was upside. A "long" trade is entered above the breakout bar. Targets are placed at the depth of the rectangle from the trade entry at 1440.5. A "stop" order was placed in the middle of the channel at 1433.

Trading Rectangle Patterns



Trading Rectangle Pattern

The example above shows a "Rectangle" formation from the Exxon Mobile (XOM) daily chart. From late June 2005 to September 2005, XOM traded in a narrow range from $57.5 to $61 forming a "Rectangle" pattern formation. Late September 2005, XOM broke out of the upper trading channel and closed above $61. The trades are only entered in prior trend direction.

1. Enter a "long" trade above the breakout bar at $61.
2. The height of the "Rectangle" pattern is $3.5.
3. Place a "stop" order below the midline of the "Rectangle" channel at $59.
4. Target the height of the "Rectangle" pattern above the breakout at $64.

6.3. Flags

Bull Flag

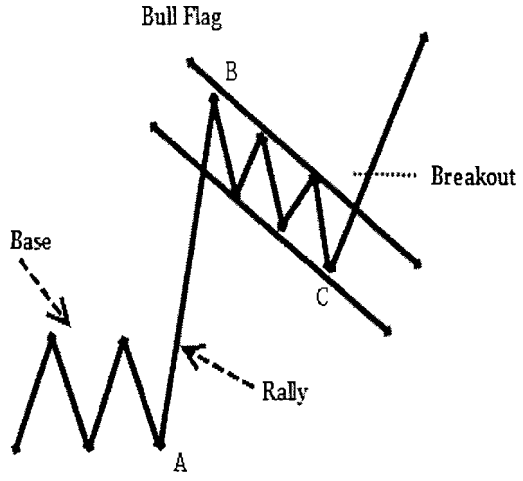
"Flags" are continuation patterns representing a small pause in the market trend. They can be easily spotted as they appear right after a sudden and quick burst from a trading range. In dynamic and quick markets, Flags form as prices pause and move in the same direction as the prior trend after a clear breakout. Flags are known to be very reliable patterns.

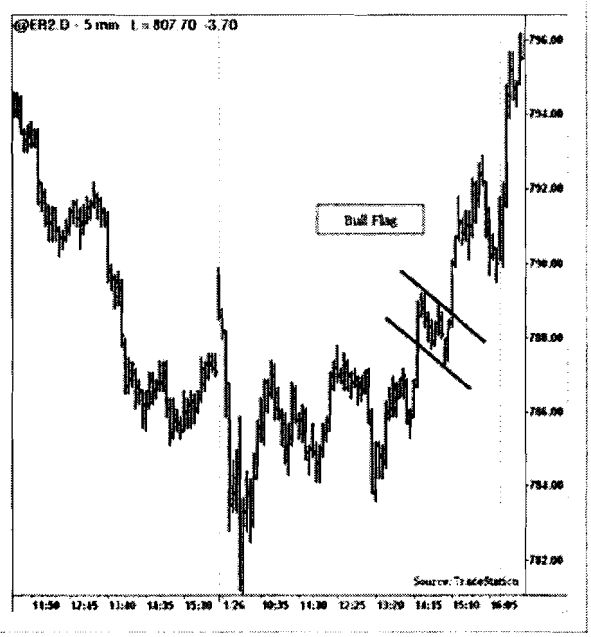
"Bull Flag" patterns can be spotted when the market breaks out from a range and makes "lower highs" and "lower lows" in a tight formation. The trend lines connecting these highs and lows are near parallel. Also, tight and well defined "flags" perform better than short and zigzag "flags."

Trade:
After a series of "lower highs" and "lower lows," connect prices with two parallel trend lines. Wait for a clear breakout to the upside. Price closing outside the upper trend line is the first sign of a breakout. Enter a "long" trade one tick above the high of the breakout bar. Another clear signal of a "Bull flag" breakout occurs when prices trade above the recent "swing high".

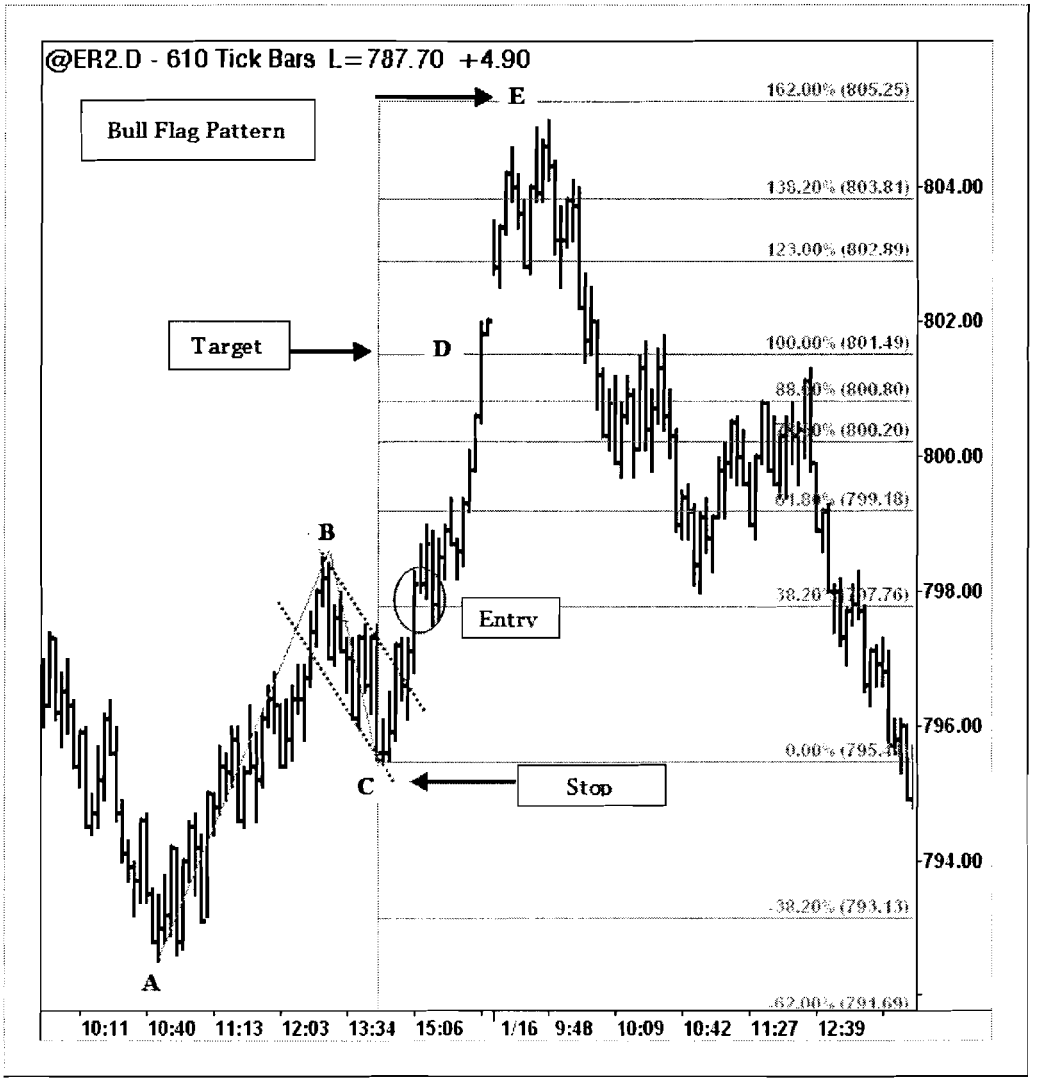
Target:
Measure the prior distance from the "swing low" at point A to the "flag" formation at point B. Target 70% to 100% of this range from C. Secondary targets in bull markets are 138% to 162% of AB from C.

Stop: Place a "stop" order below the "low" of the "flag."





Trading a Bull Flag



Trading A Bull Flag

The chart above illustrates a "Bull flag" trade from the Russell Emini futures (ER2) 610 tick chart. After a rally from "A" on January 15, 2007, the ER2 made a "swing high" at "B" and formed a "Bull flag" with a series of "higher highs" and "lower lows". A late day rally triggered a breakout from the top trend line as prices "closed" above the previous "swing high" at 797. A long trade is entered with a "stop" order at 795 (below level C). Targets are set at 70% to100% of the AB range from C and 138% to 162% of the AB range from "C".

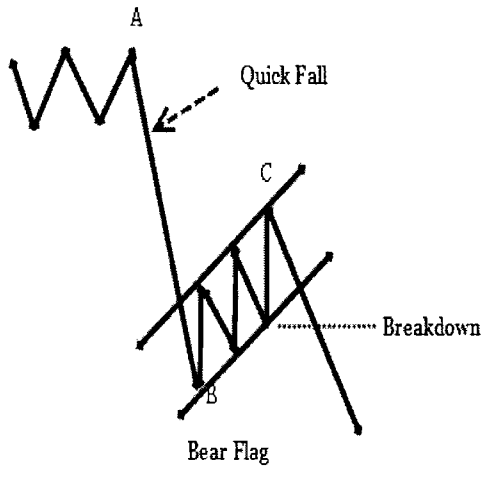
Bear Flag

"Bear Flags" usually occur as markets fall from a base and pause in a downtrend. They are almost identical to "Bull flags," but in the opposite direction. "Bear flags" can be easily spotted as they make "higher highs" and "higher lows" within the "flag" area. The trend lines connecting "highs" and "lows" are almost parallel. A clear breakdown confirmation is needed to trade these patterns as the price continues in the same direction prior to the "flag" formation. Like "Bull flags," "Bear flags" are also very reliable.

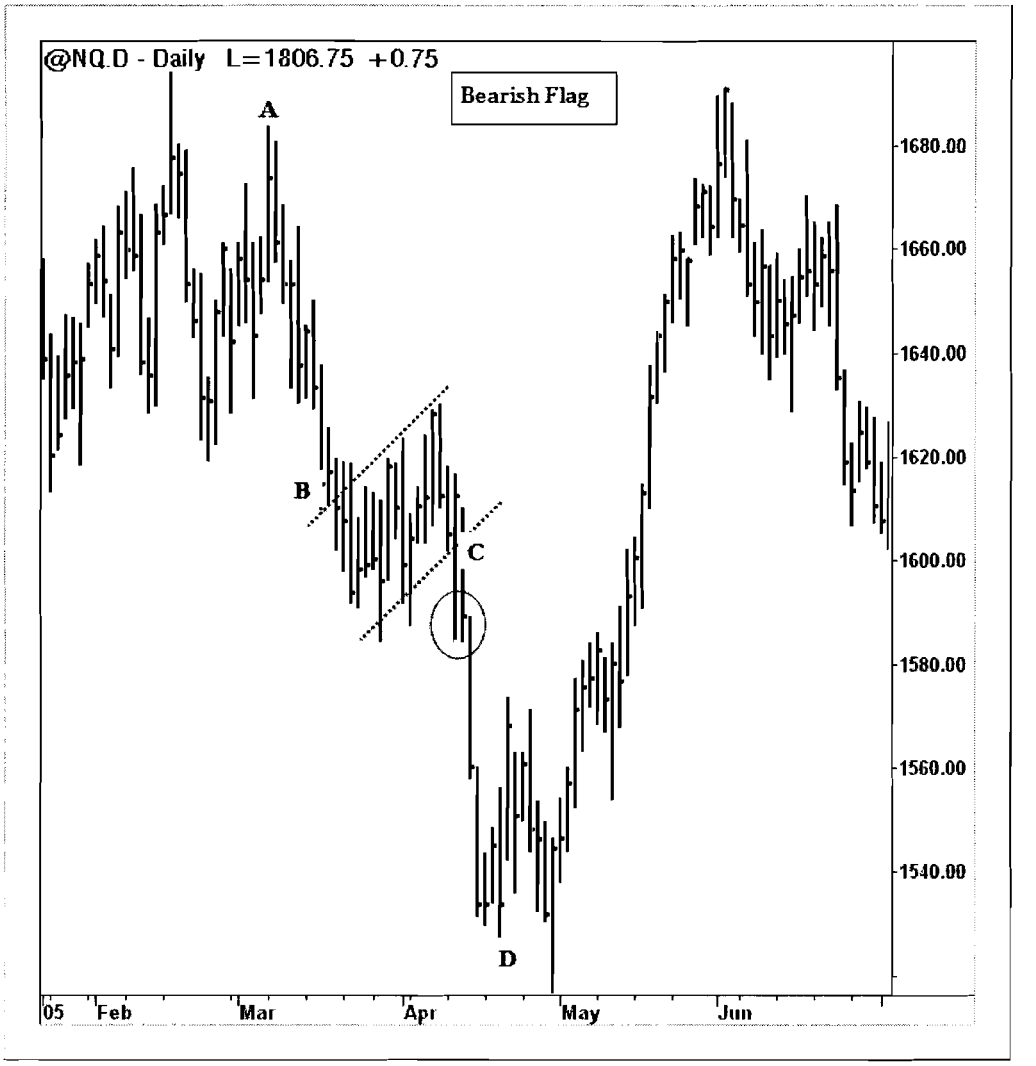
Trade: After a series of "higher high" tops and "higher low" bottoms, prices will breakout of the lower-trend line. Wait for confirmation of breakdown with a long range bar. One of the best confirmations occur when prices "close" below a previous "swing low" (of bear flag). Enter a "short" trade one tick below the "swing low" or previous bars' low.

Target: A typical target in "Bear flags" is from 76% to 100% of the AB range prior to the "Bear flag". The secondary targets are from 138% to 162% of the range AB.

Stop: Place a "stop" order above C to protect the "short" trade.



Trading a Bear Flag

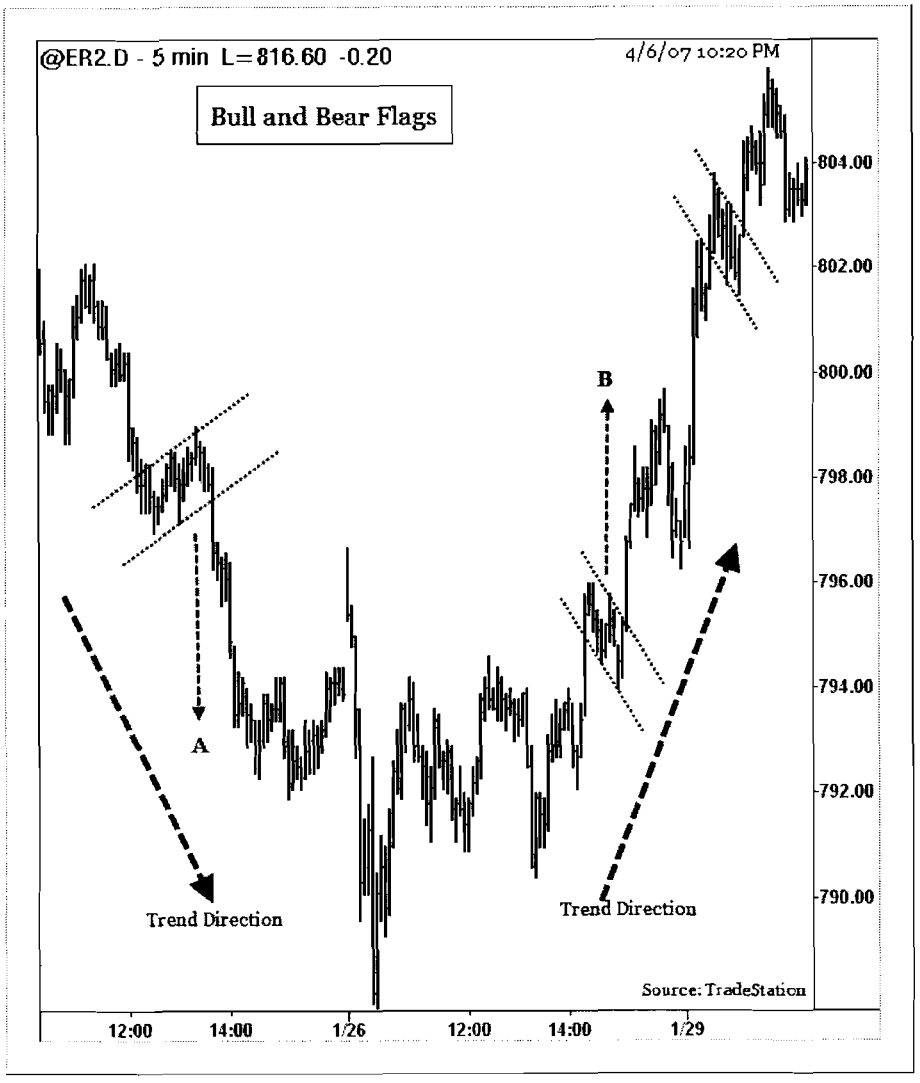


Trading A Bear Flag Pattern

The example above illustrates a "Bear flag" formation from the Nasdaq Emini futures (NQ) daily chart. In March 2005, NQ made a swing high (A) and by late March 2005, NQ prices sold-off to 1580 level. A retracement of 38% into the AB swing (at C) formed a "Bear flag". A breakdown bar (in the prior down trend direction) below the trendline (at C) gave a short trading opportunity.

1. Enter a "short" trade below the low of the breakdown bar (at 1580).
2. A "stop" order was placed above the "high" of the top trend line (swing high).
3. Targets were set at 70% to 100% of the AB range prior the "Bear Flag" from C.

Trading Bull and Bear Flags



Trading Bull and Bear Flags

The example above illustrates "Bull" and "Bear" flags from the Russell 2000 chart. Intraday charts produce more opportunities to trade "Flags" as the results will be known quicker than day or longer term charts. "Flag" patterns are continuous patterns and trades are only taken in the direction of the current major trend. In the chart above, "trade" A is taken in the direction of a major trend after a breakdown bar from "bearish flag." A "short" trade is triggered below the low of the breakdown bar. A "stop" order is placed above the high of the "flag. Targets are set at 70 to 100% range of the "Flag." Similarly, a "long" trade B is triggered in the uptrend. A "stop" order is placed below the low of the "flag" pattern and a "target" is set at 70 to 100% range of the "Flag."

6.4. Wedge Patterns

Rising Wedge Pattern

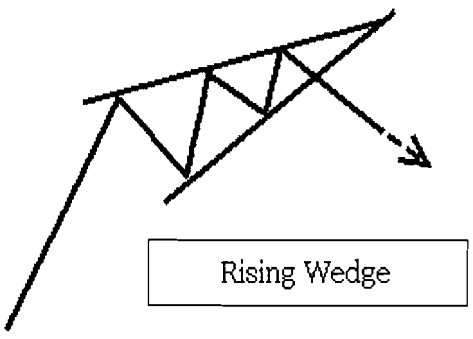
"Rising Wedge" patterns are similar to "Symmetric Triangles" but "Rising Wedge" patterns form in an angle where as "Symmetric Triangles" are mostly horizontally formed. "Rising wedge" patterns have higher highs and higher lows and are connected with two angled (slanted) trend lines. These trend lines converge at the top. The price must intersect each trend line at least twice before the pattern fully emerges.

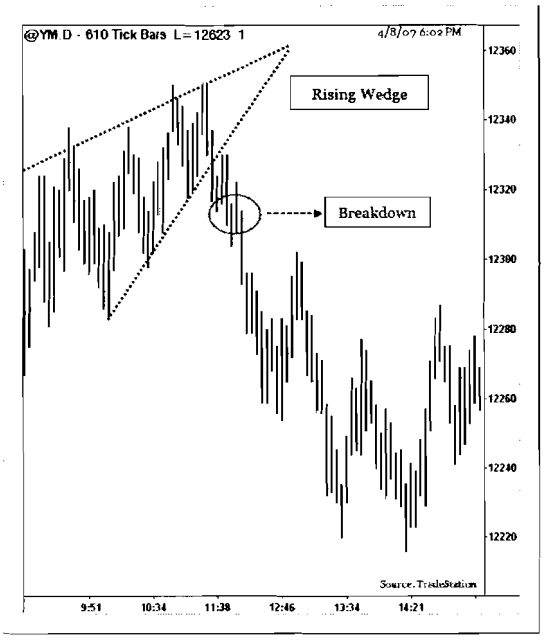
"Rising wedges" are usually bearish in both uptrend and downtrend markets. In addition, they have a high failure rate and are relatively difficult to spot them. They seem to work well in bullish markets.

Trade:
"Rising wedges" are defined by the trend lines connecting the highs and lows of the pattern. The price trading outside the lower trend line signals a potential short trade. A "short" trade is entered when the prices close below the breakdown's bars low (must be below the trendline).

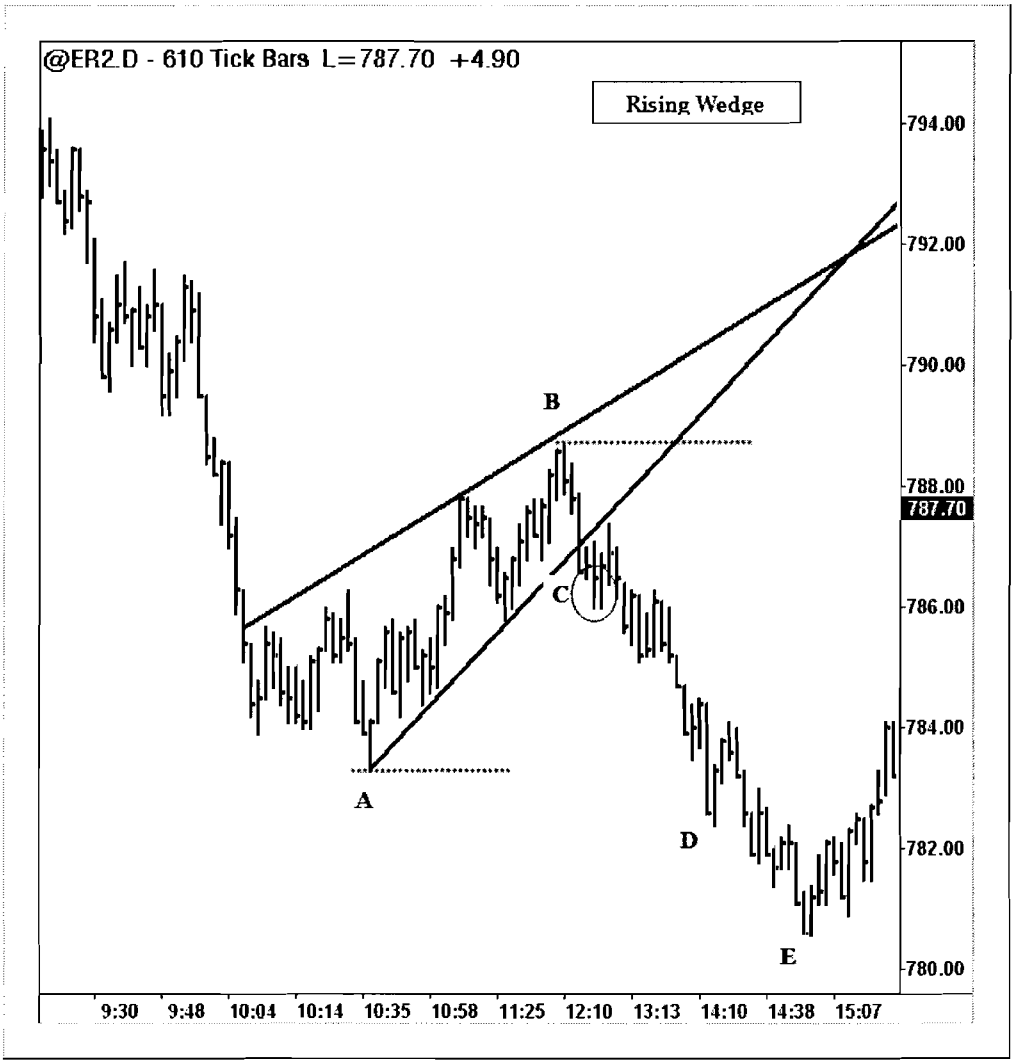
Target:
After trade entry, a target is set at the lowest point in the wedge formation. Another target measure would be the length of "wedge" pattern from the breakdown level.

Stop:
Place a "stop" order above the last "swing high" of the "wedge" pattern.





Trading Rising Wedge Pattern



Trading Rising Wedge Pattern

The example above illustrates a "Rising wedge" pattern from the Russell Emini futures (ER2) 610 tick chart. ER2 made a "Rising wedge" pattern in a downtrend. The pattern suggests a pullback rally in downtrend. ER2 made higher highs and higher lows with trend lines connecting in an angle suggesting a potential opportunity for a "short" trade when prices close below the trend line.

1. Enter a "short" trade below the low of the breakdown bar (at C).
2. Place a "stop" order few ticks above previous swing high at B.
3. The first target is placed at 100% of the AB range from C.

Falling Wedge Pattern

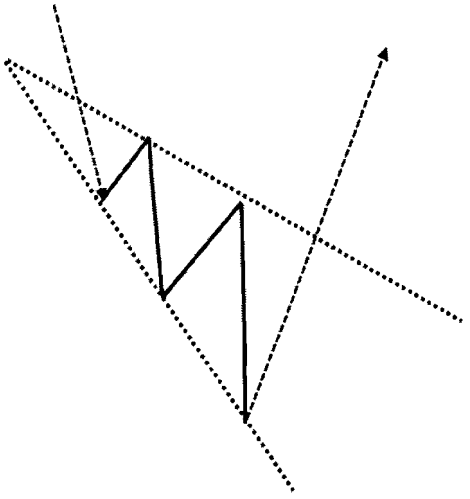
"Falling Wedge" patterns are similar to "Symmetric Triangles" as they form in an angle; where as the "Symmetrical Triangles" form horizontally. "Falling wedge" patterns have lower highs and lower lows and are connected with two angled, slanted trend lines. These trend lines diverge at the bottom. Another type of "wedge" (inverse) pattern has trend lines converging at the bottom. The trend direction on the breakout from the "Falling Wedge" pattern would be upside.

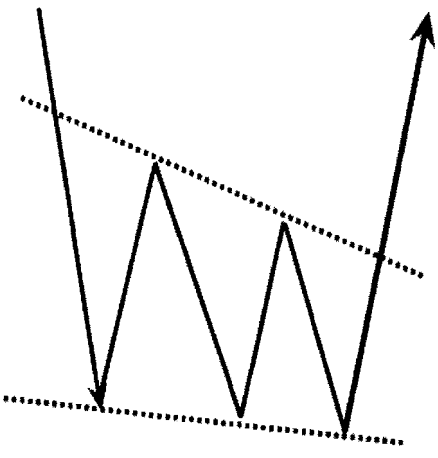
"Falling wedges" are usually bullish in uptrend and downtrend markets. Similarly, "Falling wedge" patterns have a high failure rate. They are relatively difficult to spot them, and tend to work well in bearish markets.

Trade:
The "wedge" patterns are defined by trend lines connecting the "higher-highs" and "lower-lows." A trend line breakout suggests a "long" trade. Trades are entered after a clear breakout from the trend line. Enter a "long" trade, one tick above the high of the breakout bar from the trend line.

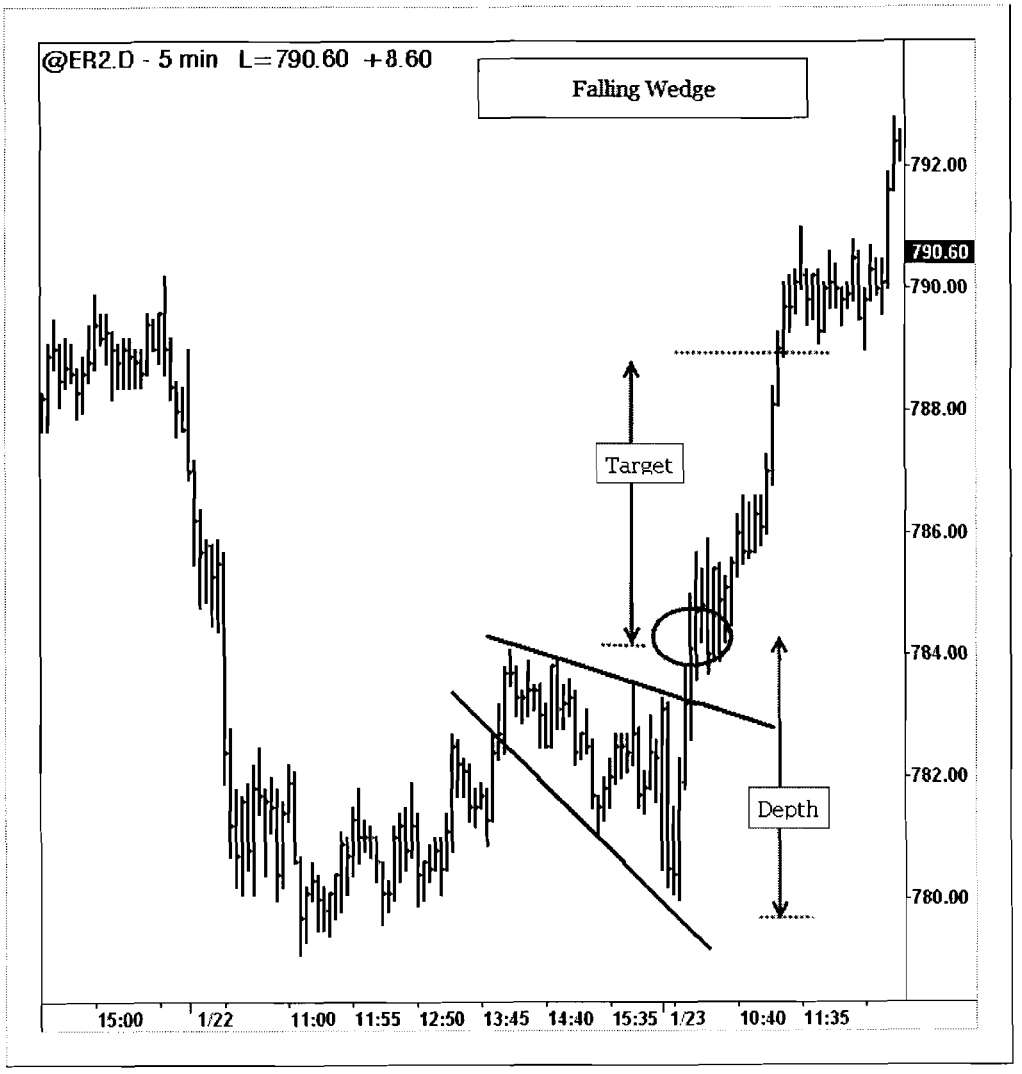
Target:
Place a target at the higher "swing high" level of the "wedge" pattern. A secondary target is set at the depth of the wedge pattern from the breakout level.

Stop:
Place a "stop" order below the lowest level of the "wedge" pattern.





Trading Falling Wedge Pattern



Trading Falling Wedge Pattern

The example above illustrates a "Falling wedge" pattern from the Russell Emini futures (ER2) 5m chart. "Falling wedges" are bullish patterns. On January 22, 2007, during the afternoon's trading, ER2 made lower highs and lower lows to form a "wedge" pattern. On January 23, ER2 traded higher and closed above the trend line.

1. A "long" trade was entered above the breakout bars high.
2. A "stop" order was placed below the low of the "wedge" at the 780 level.
3. A target is set at the depth of the "wedge" pattern from the trade entry.

Trading Falling Wedge Pattern

Trading Falling Wedge Pattern

The example above shows a "Falling wedge" pattern from the Russell 2000 15 minute chart. A "wedge" pattern developed from March 13, 2007 to March 14, 2007 (until 12pm) as ER2 made lower lows and lower highs. Two trend lines are drawn in the chart above connecting these "lower highs" and "lower lows." A "close" above the upper trend line signals a "long" trade above the 775 level.

1. Enter a "long" trade above the high of the trend line breakout bar.
2. Place a "stop" order below the low of the "wedge" pattern.
3. Target the depth of the "wedge" pattern from the trade entry level.

6.5. Diamond Pattern

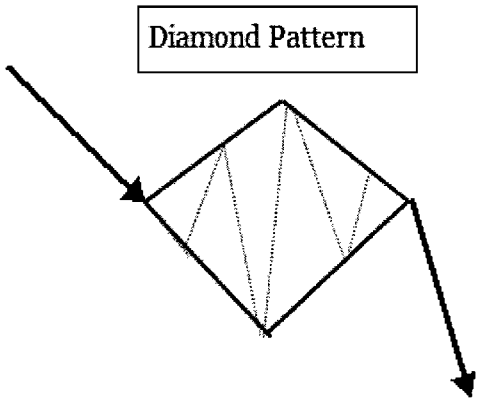
Diamond Pattern

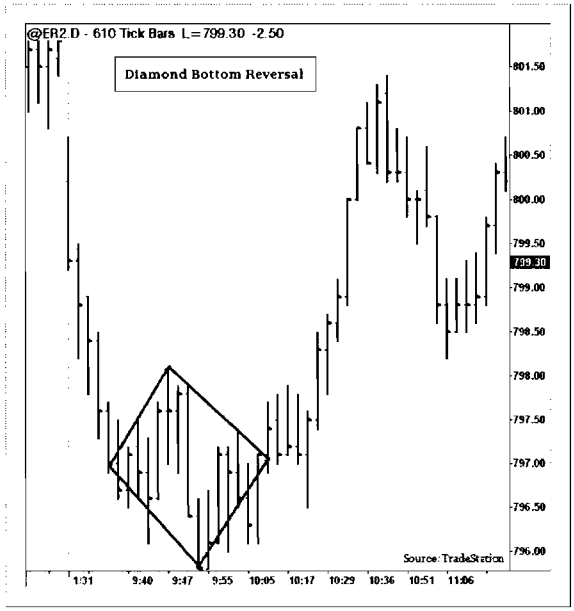
The "Diamond" pattern is very reliable and consists of four-sided price action. It is also similar to adding two "triangle" patterns, Inverted and Symmetrical, together. "Diamond" patterns are both continuation and reversal patterns. If the pattern occurs in the midst of a trend, it will present a continuation of the trend in the same direction prior to the formation. If the pattern occurs at the tops or bottoms, it will be a reversal pattern. Diamond "tops" form more often than Diamond "bottoms."

Trade: In "Diamond" patterns, continuous patterns form more often than reversal formations. In a continuation pattern, wait for a breakout of the "Diamond" pattern and trade in the direction of the trend prior to the pattern formation. In reversal formations, trade in the opposite direction of the prior trend. Confirm breakouts and breakdowns by price-action.

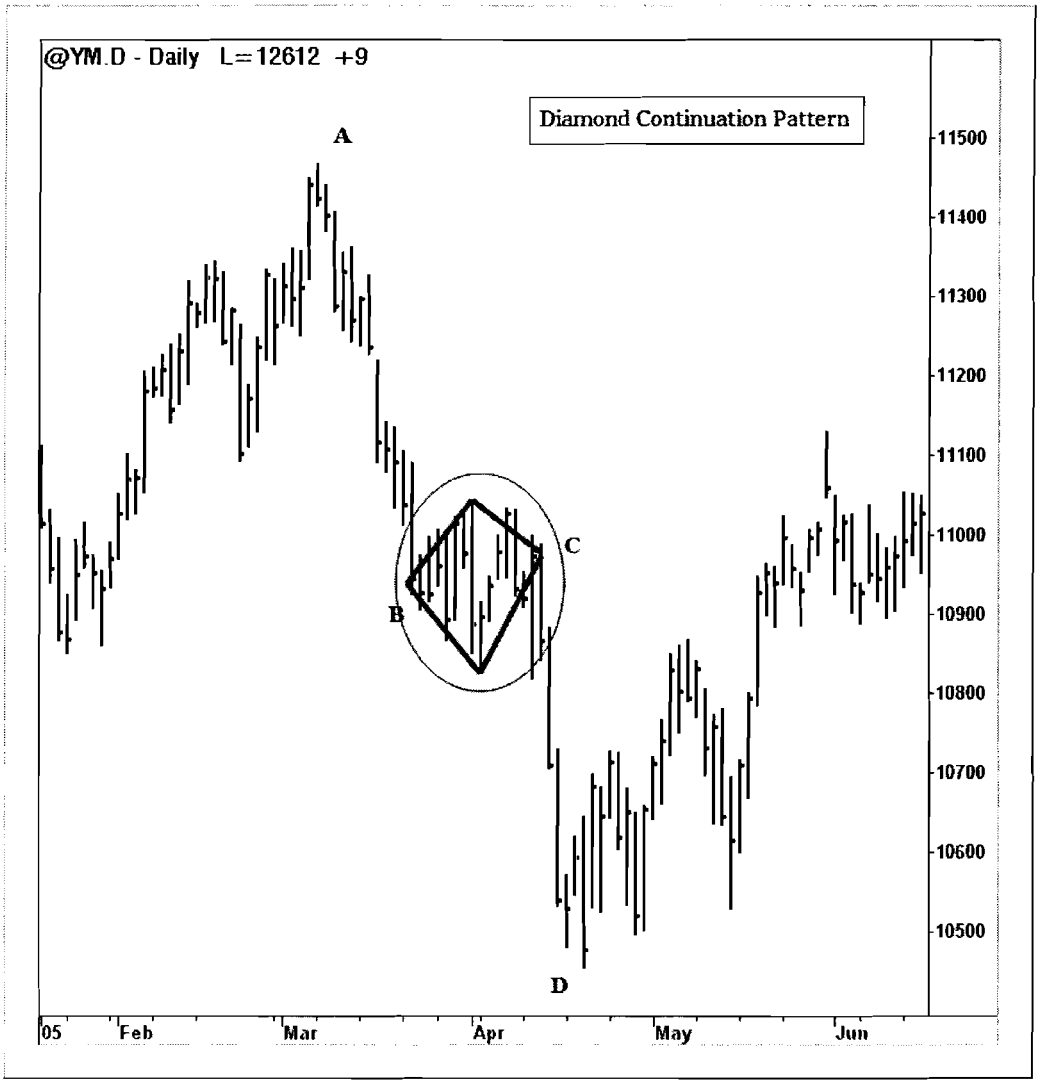
Target: Continuation "Diamond" patterns provide excellent target criteria. The prior range before "Diamond" formation is the target from the breakout or breakdown level. In reversal formations, prior major swing highs/lows are set as the targets.

Stop: Place a "stop" order above the high of the "Diamond" pattern for a short-trade and below the low of the "Diamond" for a long-trade.





Trading Diamond Pattern



Trading Diamond Pattern

The example above shows a continuation "Diamond" pattern from the daily Dow Emini futures (YM) chart. In March 2005, after making a "swing high" of 11460 (A), YM corrected and declined to 10500 (B). While correcting, YM paused and formed a "Diamond" pattern from mid March to April 2005.

1. Wait for a clear breakdown from the "Diamond" pattern.
2. Enter a "short" in the direction of the prior trend before the "Diamond" pattern at 10850.
3. Place a "stop" order above the high of the "Diamond" at 11050.
4. Target the range of AB (500 pts) from C to 10500.

Trading Diamond Pattern

Trading Diamond Pattern

The example above shows a "Diamond" pattern continuation from the S&P Futures (ES) 610 tick chart. On January 25, 2007, after making a "swing high" of 1446 (at A), the ES corrected and traded lower to 1438 (at B). The ES formed a "Diamond" pattern from 1436 and 1438.

1. Wait for a clear breakdown from the "Diamond" pattern.
2. Enter a "short" trade in the direction of the prior trend (before the "Diamond" pattern) at 1435.
3. Place a "stop" order above the high of the "Diamond" at 1438.
4. Target the range of AB (8 pts) from C to 1428.

Chapter 7: Channels

7.1. Rectangle Channels

Rectangle Channels

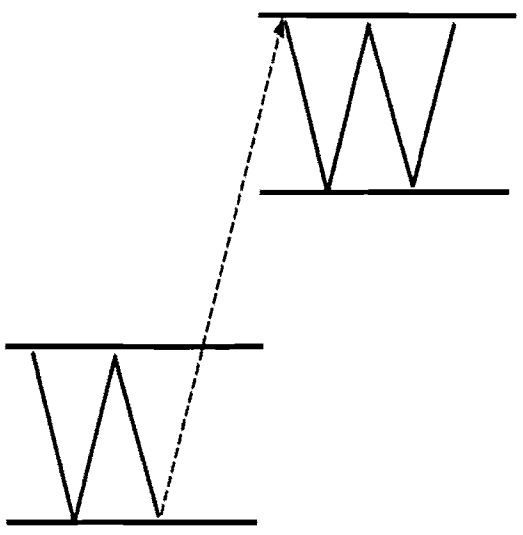
"Rectangle Channels" are continuation patterns. Rectangle channel breakouts in the trend direction are more reliable than breakdowns against the trend. Rectangle channels form more in the beginning stages of longer-term trends. A base building before a clear trend run is a very reliable pattern.

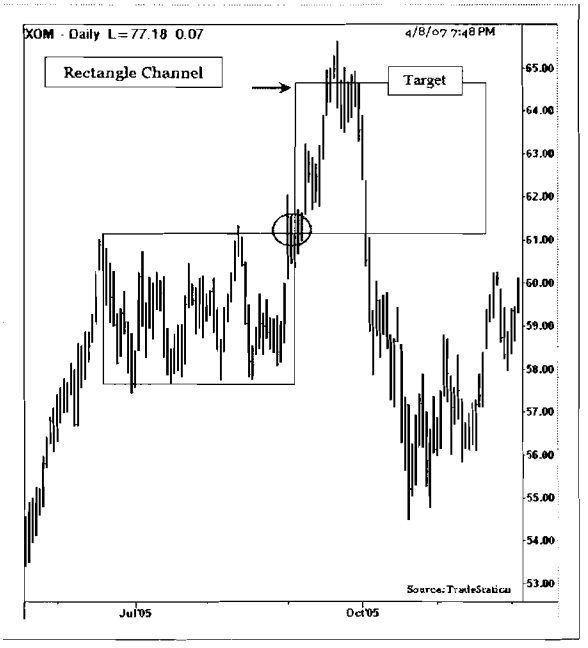
"Rectangle" channel tops are rarely formed compared to the channel "bottoms." Intermediate trend "rectangle" formations are reliable continuation patterns and they continue in the prior trend directions.

Trade:
A trade in "Rectangle channels" is triggered when a top (resistance) or bottom trend line (support) is broken and confirmed by price-action. A "long" trade is entered when price closes above the high of the breakout bar. A "short" trade is entered when price closes below the low of the breakdown bar.

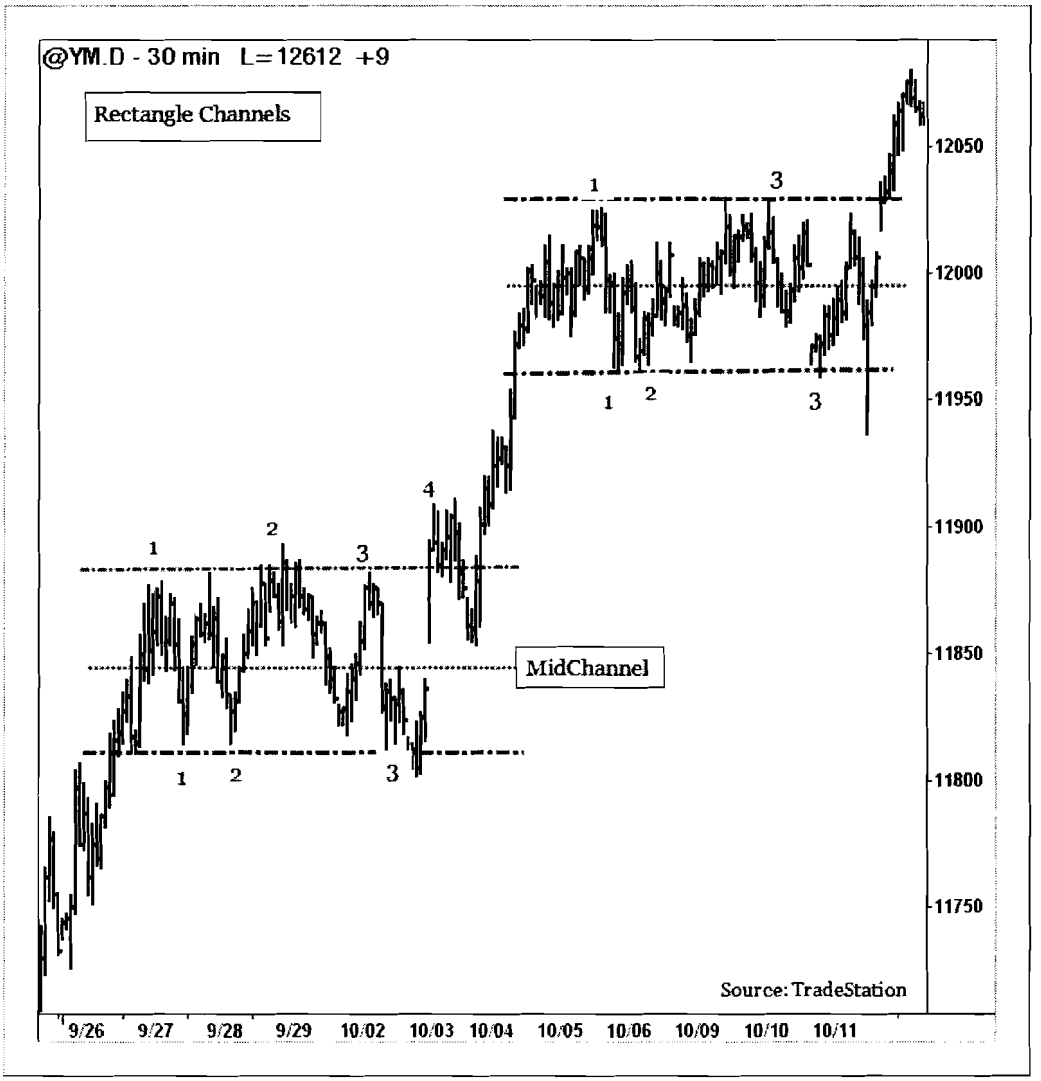
Target: The width of the "Rectangle" channel usually defines the resulting target move. The wider the rectangle (like base), the bigger the move. The height of the rectangle, at the top to bottom trend line, is the first target in "Rectangle" channel trades.

Stop: "Rectangle" channel failures can happen if prices trade against the prior trend before the pattern formation. A "stop" order is placed at the middle of the rectangle channel to protect the trade.





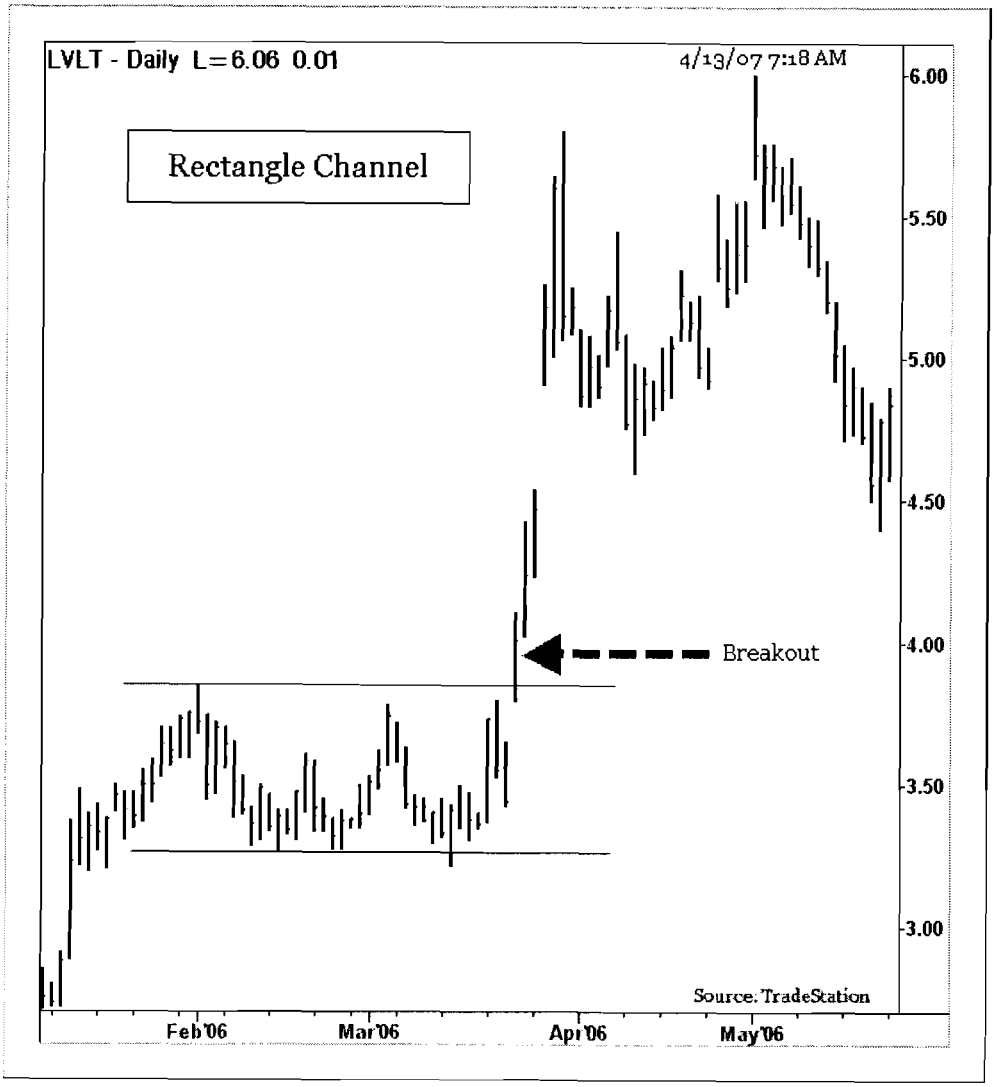
Trading Rectangle Channels



Trading Rectangle Channels

The example above shows A "Rectangle" channel formation from the Dow Emini futures (YM) 30 minute chart. The first "Rectangle channel" pattern was confirmed in early October as it closed below the lower trendline. But there was no trade triggered as prices never traded below the breakdown bar's low. On October 3, YM traded higher and closed above the upper trend line to confirm a "Rectangle" channel breakout in prior trend. A "long" trade is entered in the direction of the prior trend before the "Rectangle" formation (up side). A "stop" order was placed at the center of the channel. A target is set at the height of the "Rectangle" channel from the breakout level. The following week, a second "Rectangle" channel emerged with a similar long trade setup.

Trading Rectangle Channels



Trading Rectangle Channel

The example above shows a "Rectangle" channel formation from the Level Three Communications (LVLT) daily chart. From February 2006 to April 2006, LVLT traded in a narrow range "Rectangle" channel from $3.25 to $3.75. In late March 2006, LVLT traded outside the "Rectangle" channel suggesting a potential upside in the stock. Most "Rectangle" channels are continuation patterns and trades are entered in the prior direction of the trend before the channel formation.

1. Enter a "long" trade above the high of the breakout bar.
2. Place a "stop" order below the low of the "rectangle" channel.
3. Targets are set at rectangle's height from the breakout level.

7.2. Donchian Channel

Donchian Channel

Richard Donchian created one of the best trading systems based on 4-week price channel breakouts and breakdowns. This system is widely used by traders on a daily, weekly and monthly basis. A breakout is described as the price exceeding the high or low of n-Number of days/weeks/months. Donchian method uses 20-period channels. This method works well in both up and down trends, but it evaluates poorly in side-ways markets as most breakout systems do. There are many other variation theories which are created using the Donchian Channel breakout method.

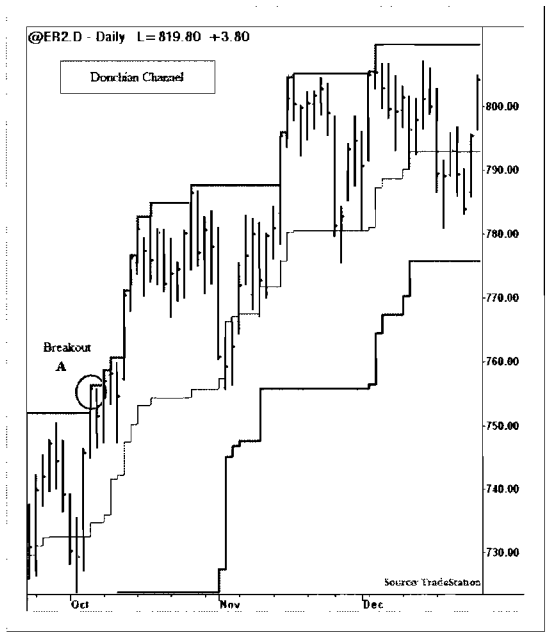
Donchain trading methods suggest entering new trades at retracement in the direction of the channel. Donchain also used a mid-channel between the "highest high" and "lowest low," and closed positions at mid-channels.

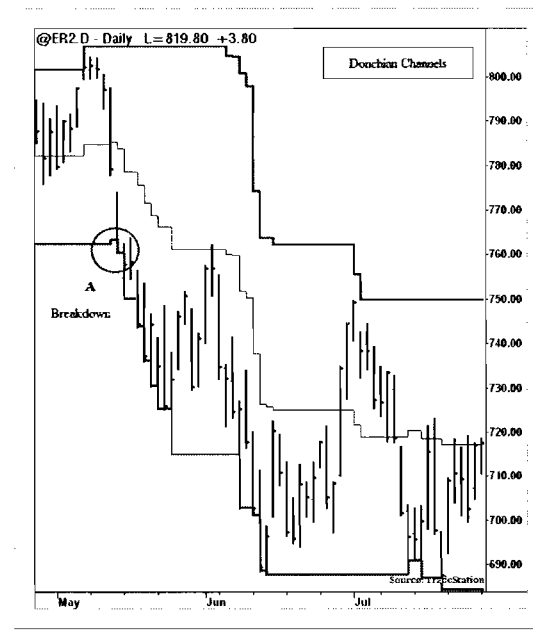
Trade:

1. Enter "long" or "cover short" when price exceeds the highest high of a 4-week range.
2. Enter a "short" when price falls below the "lowest-low" of a 4-week range.

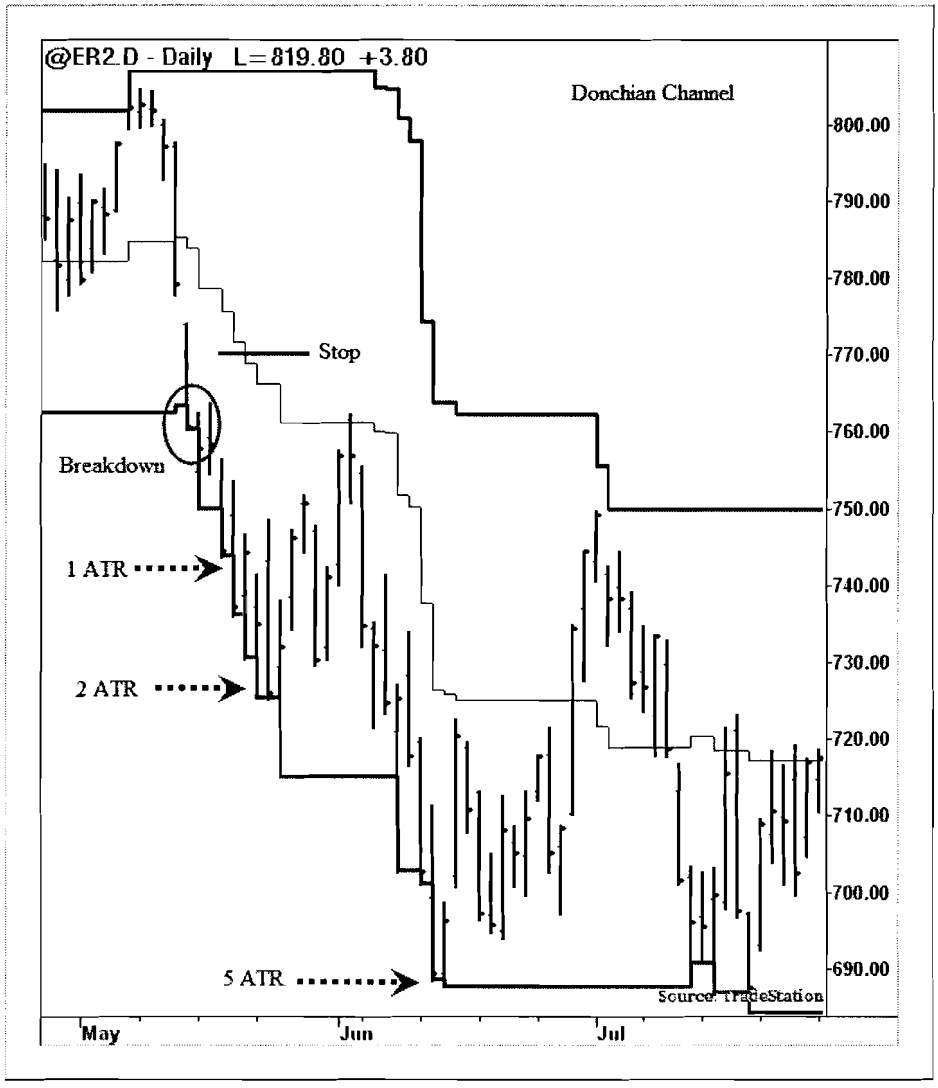
Target: Most breakouts do not result in trends. However, protection of Donchian channels at the price range or fixed profit range is necessary. Exit trades when prices reach 1.5 to 2 Average True Ranges from the entry.

Stop: Protect trades at mid-channel level or when price trades at a 10-day "low" in a "long" trade or at 10-day "high" on "short" trades.





Trading Donchian Channel

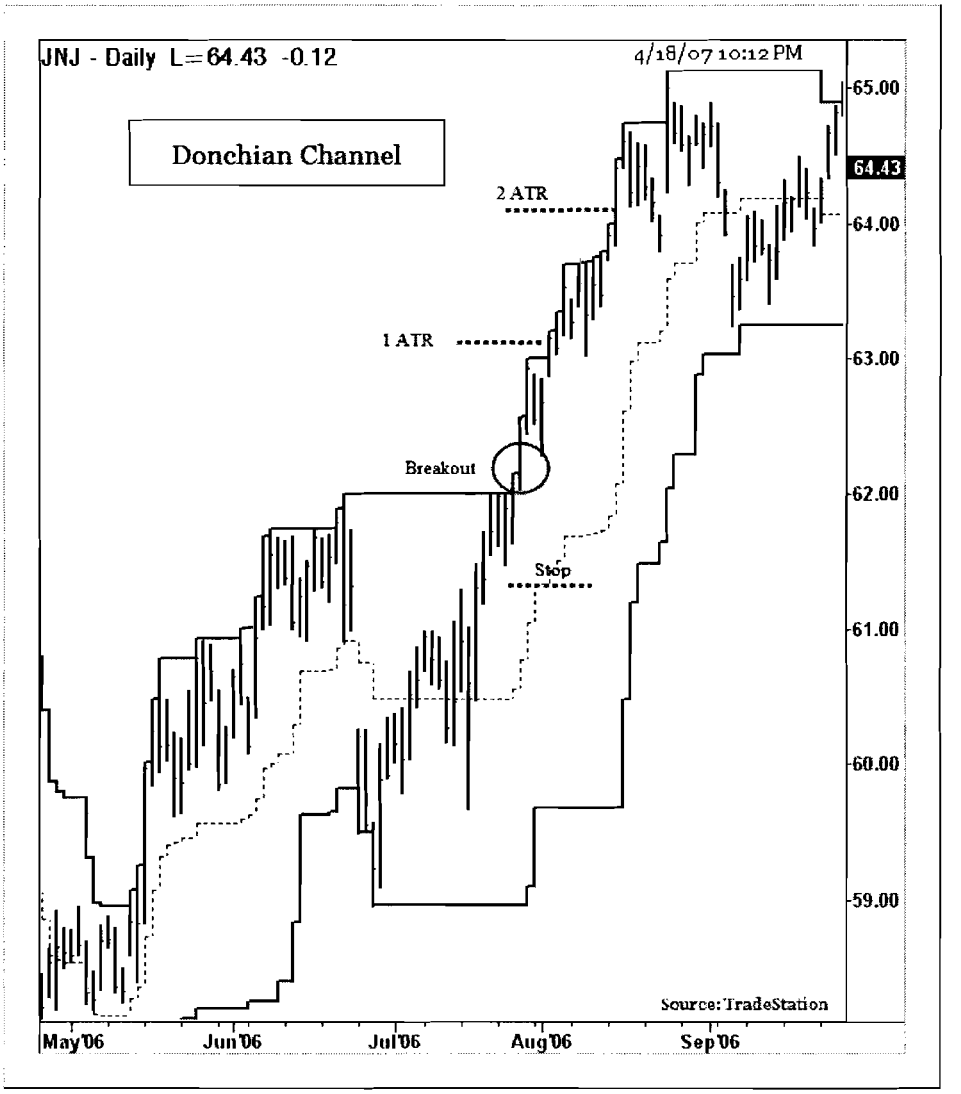


Trading Donchian Channel

The example above illustrates a Donchian Channel trading system from the daily Russell Emini (ER2) chart. In mid May 2006, ER2 triggered a "short" trade as it closed below the 4-week Donchian price channels at 755 levels. The Average True Range (ATR) in mid May was 12 points.

1. Enter a "short" trade below the low of the breakdown bar at 754.
2. Place a "stop" order at mid channel above the trade entry bar.
3. Set targets about one to two ATR levels from the breakdown levels.

Trading Donchian Channel



Trading Donchian Channel

The example above illustrates a Donchian channel from the Johnson and Johnson (JNJ) daily chart. A 4-week Donchain channel is plotted on JNJ's daily chart. In late July 2006, a long signal was triggered when JNJ closed above the 4-week upper channel at $62. The Average True Range (10 period) for JNJ was 0.85 cents.

1. A "long" trade was entered above the breakout bar's high.
2. A "stop" order was placed at the mid Donchain channel line and used as a trail stop.
3. Targets were either set at fixed ATR lengths or used the center Donchian line as the trailing stop. The target was achieved around $64 using a center line as the trailing stop.

7.3. Broadening Pattern (MegaPhone)

Broadening Top/Bottoms

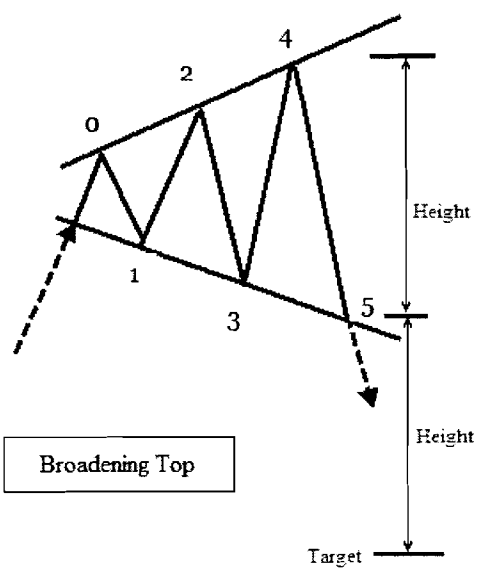
"Broadening Tops and Bottoms" are rare and difficult to detect, but they are very reliable patterns. They are also known as "Symmetric Inverted Triangles" or "MegaPhones." This pattern consists of broadening each swing reversal with larger than the previous swing. The "Broadening top" consists of five swings points and usually the last swing reverses the trend direction that existed prior to the formed pattern. In a "Broadening top" formation, the first pivot, or turn, must be down, and in a "Broadening bottom" formation, the first pivot, or turn, must be up.

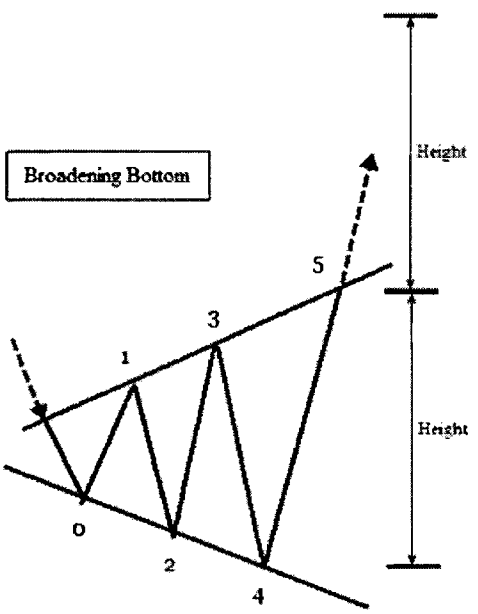
One of the critical points in "Broadening" tops and bottoms pattern is the mid line. In many cases, the rallies/declines stop at the mid line to retest the prior trend line. Usually this is the last swing before a clear breakout/breakdown occurs.

Trade: A trade is taken in the direction of the breakout/breakdown from of the pattern. When a price bar closes outside the pattern in the direction of the breakout/breakdown, and that price bar is followed by a close above the high, or a close below low of the breakout/breakdown price bar, a trade is signaled.

Target: The price objective of the trade is the height of the entire pattern added/subtracted from the breakout/breakdown levels.

Stop: The midpoint in the "Broadening" pattern is the critical point and trades should be protected with a "stop" at this level.





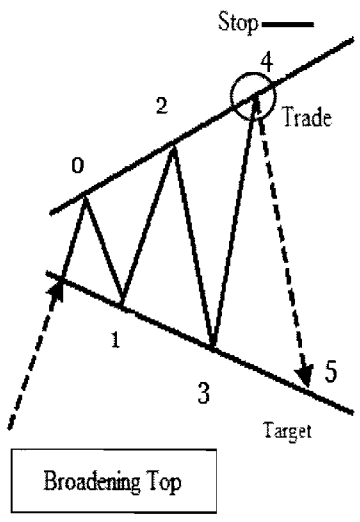
Trading Broadening Swing

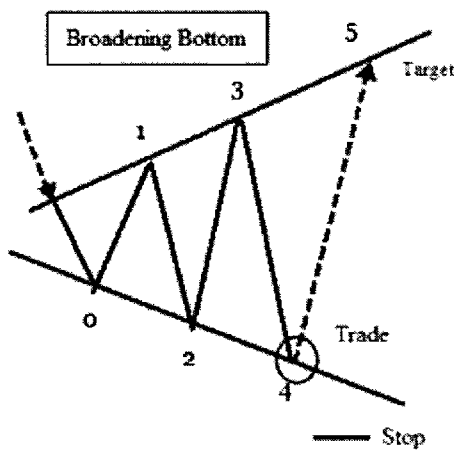
An important opportunity the "Broadening" patterns offer is trading the last swing. The number of swings in "Broadening" patterns is five. If the trend formation in the pattern is to the upside, then trading the fifth swing would be downside and can be traded from the top trendline. Similarly, if the trend direction before the pattern is to the downside, then the fifth swing will be to the upside. Keep in mind that "broadening" patterns are not infallible. However, they have a high success rate depending on where and when they form in a trend.

Trade: In "Broadening tops," the potential trade is to go short at the beginning of the fifth swing. When the prices reach the top of the trend line, enter a short position when prices start declining and closed below the previous low. Similarly, in "broadening bottoms," a long trade is possible at the lower trend line. Enter a long trade when prices start making higher highs above the lower trend line and when the price closes above the previous high.

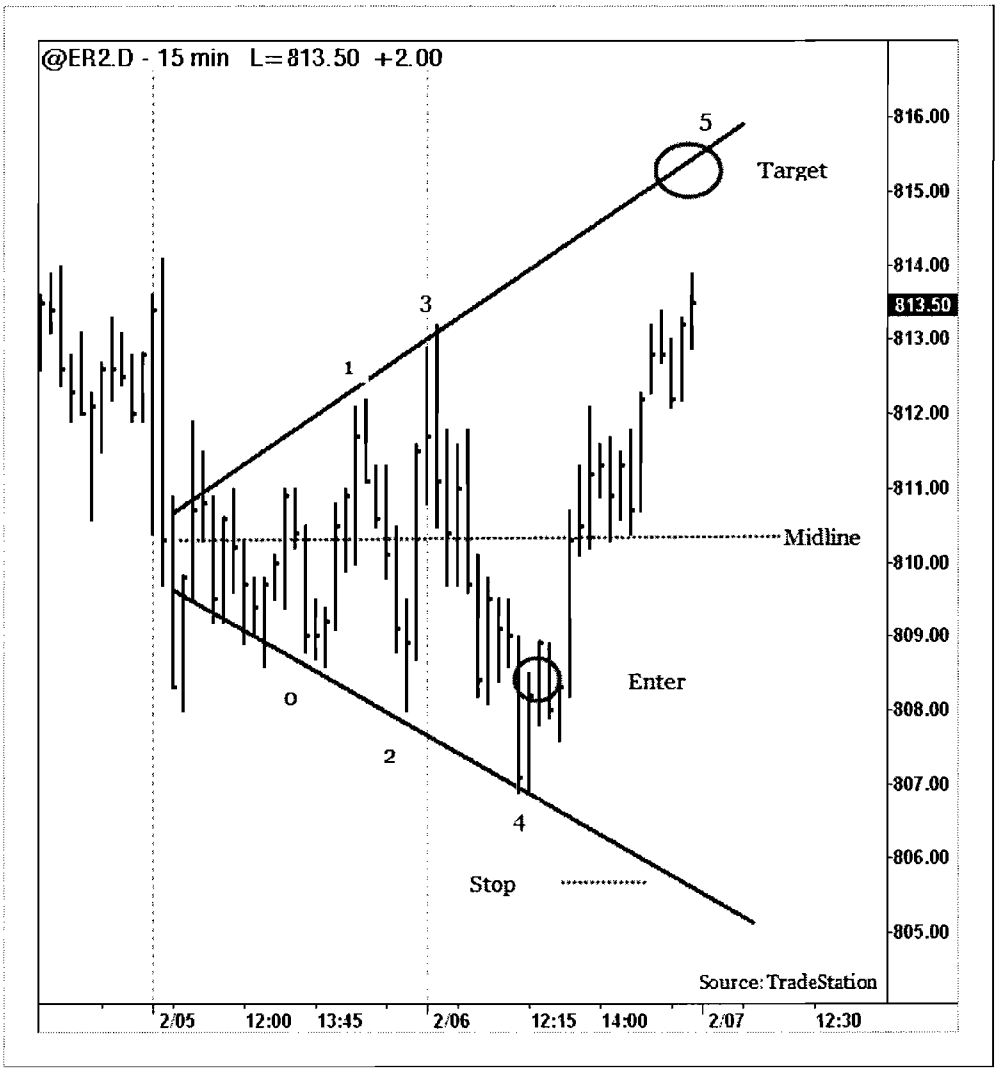
Target: A typical target for the last swing in a "Broadening" pattern would be the trend line on the opposite side of the pattern. Historically, this is the widest part of the pattern and is a very profitable setup.

Stop:
"Broadening" patterns are not infallible. They do fail and have significance as to how they fail. The pattern may be indicating a breakout/breakdown rather than a reversal of the trend. A "stop" order is placed if prices reverse and trade outside the trend lines.





Trading Broadening Swing Pattern

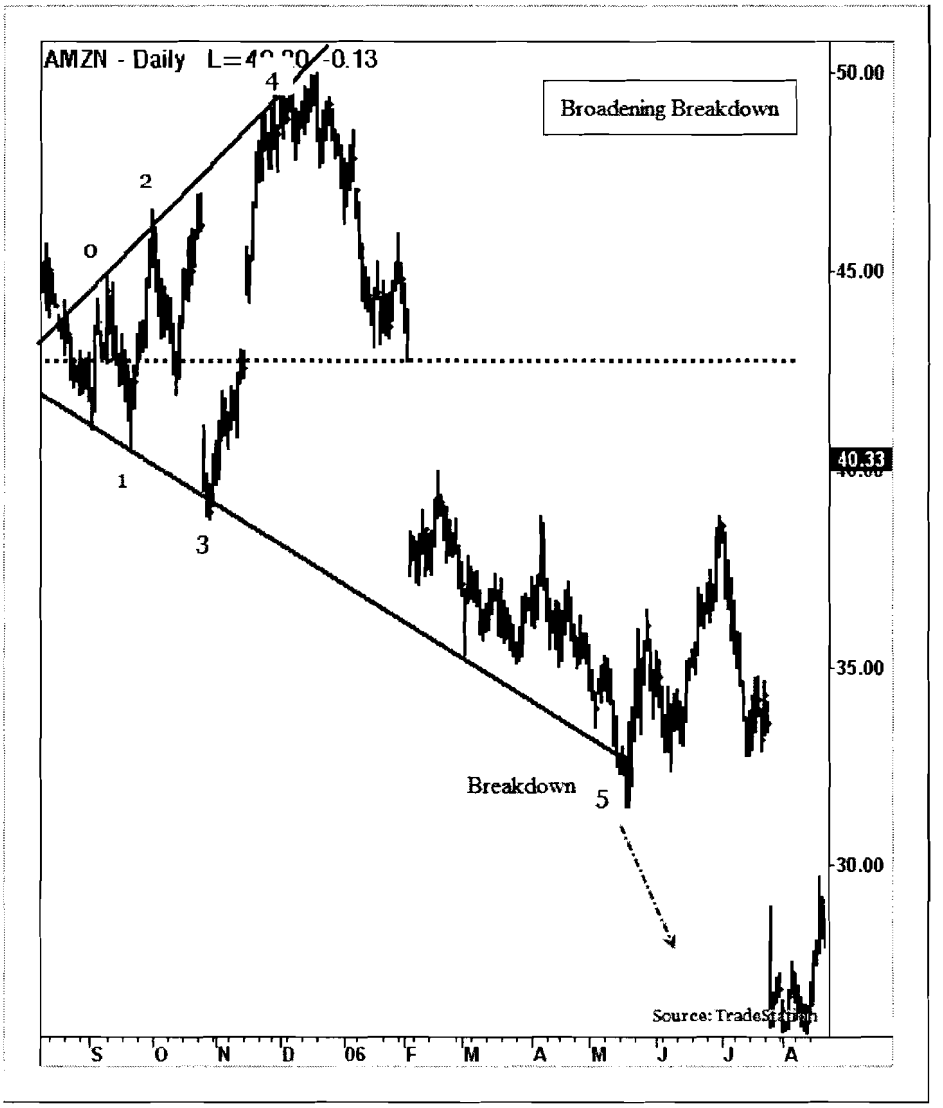


Trading Broadening Swing Pattern

The example above illustrates a "Broadening swing" trade from the Russell Emini (ER2) 15 minute chart. The ER2 chart shows two significant swings in a broadening channel as it made higher high swings and lower low swings. After two complete swings, ER2 presented an opportunity to trade the last swing from 4 to 5. When prices reach the bottom trend line at marker 4, wait for a reversal bar (close above previous high) before entering the trade.

1. Enter a "long" trade on the bar above the previous bars' high.
2. Place a "stop" order below the trend line low.
3. Take partial profits at the mid channel line.
4. Target is set at the upper trend line.

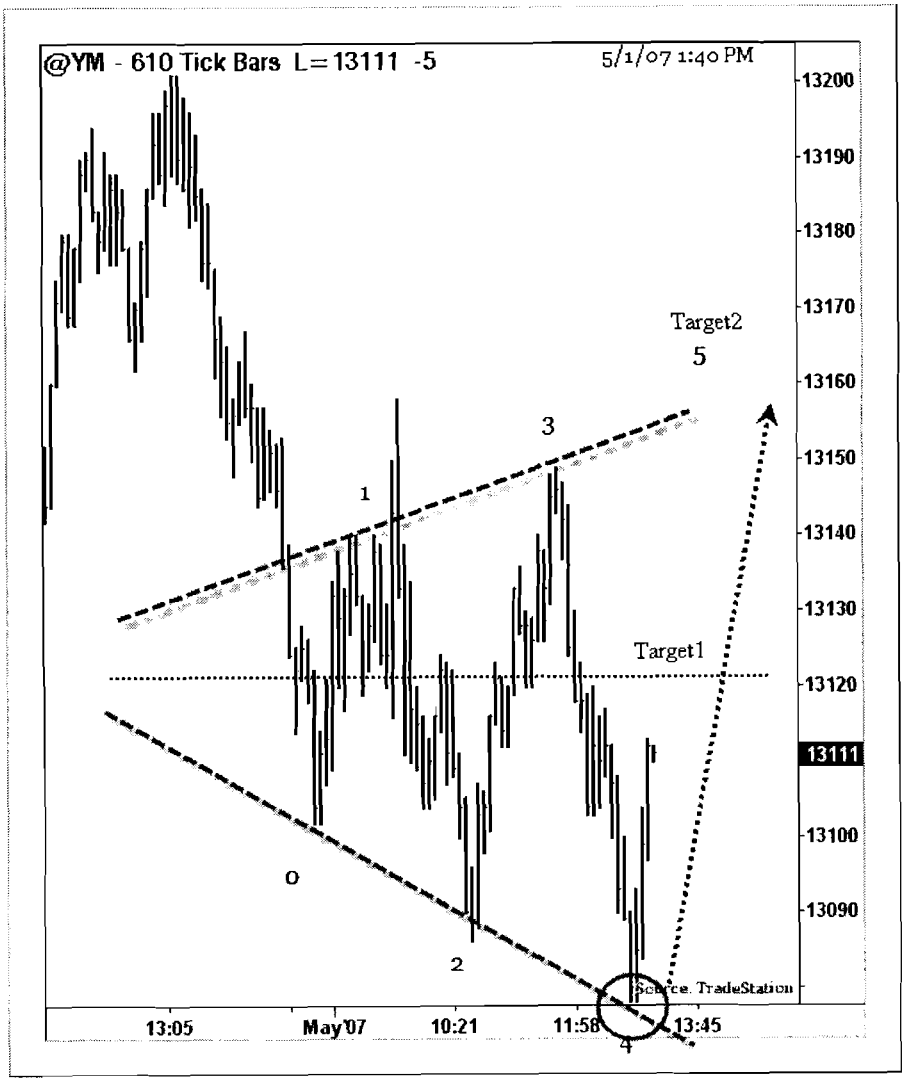
Trading Broadening Breakouts



Trading Broadening Breakdown

The example above shows a "Broadening" pattern from the AMZN daily chart. In September 2005, AMZN developed a series of higher highs and lower lows to form a "Broadening" pattern. The last swing of AMZN started in December, 2005 at $50 and reached the other end of the pattern at $33 (by May 2006). AMZN closed outside the "Broadening" channel in May signaling a potential reversal. Most Broadening patterns result in 5th swing continuation after breakout/breakdown. AMZN temporarily reversed its 5th swing from May to June 2005. In late June, AMZN traded below the lower trendline for a continuation of Broadening pattern.

Trading Broadening Bottom



Trading Broadening Bottom

The example above shows a Broadening bottom pattern in intra-day trading from the Dow Emini futures (YM) 610 tick chart. On May 06, 2007 Dow futures sold off and closed at 13100 levels. On May 07, 2007, YM attempted for a brief rally but continued its prior trend and closed at 13090 (2). YM attempted another rally to close above prior swing high (1) and sold off again to close below prior swing low (2) at 13080 level (4). The intra-day swings gave a "Broadening bottom" trading opportunity for the 5th swing.

1. Enter a "long" trade above the previous bars' high at 13092.
2. Place a "stop" order below the low of the prior swing at 13078 (4).
3. Target the 5th swing above the prior swing's high (3) at 13150. A partial position may be exited at the mid channel level (Target 1).

7.4. Linear Regression Channel

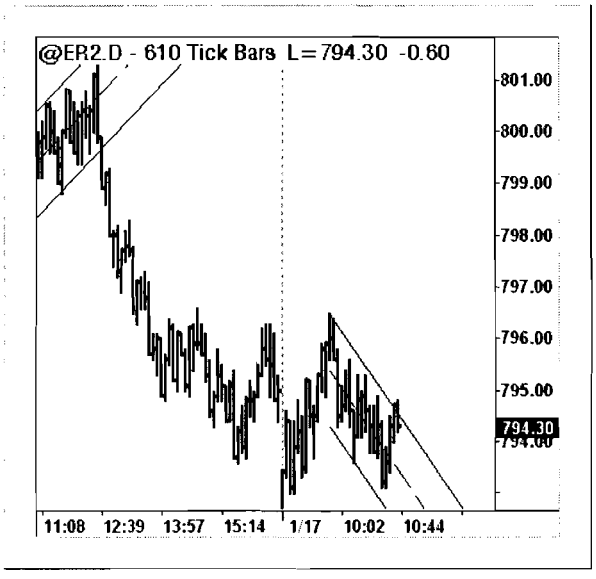
Linear Regression Channel

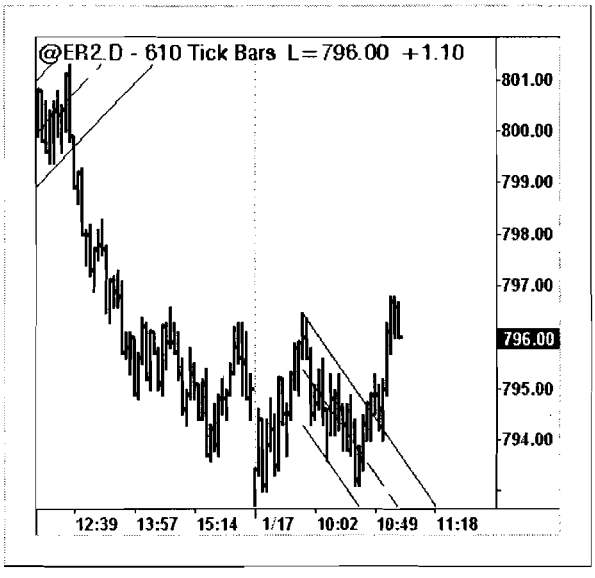
A "Linear Regression Channel" (LRC) is created by drawing an equal Standard Deviation (SD) distance from the "Linear Regression" based trend line. A "Linear regression" trend line shows equilibrium prices, where as "Linear regression" channels show the deviation of prices from the equilibrium or center line. A "Linear regression" channel is plotted on the price chart using the least squares method. In a LRC, the bottom channel indicates support and the top trend line indicates resistance. Prices trade within the LRC, and when prices exceed the upper or lower trend line, it signals a potential reversal. If the prices continue to close outside the LRC for about half of LRC length bars, then it may be signaling a trend change and a potential formation of a new LRC. Many traders use LRCs with the price-action to find key entry/exit trading opportunities.

Trade: Wait for a LRC to form for at least 12-15 bars. Price closing outside the LRC suggests potential breakout/breakdowns. Traders enter above the high of the breakout bar for a "long" trade and below the low of the breakdown bar for a "short" trade.

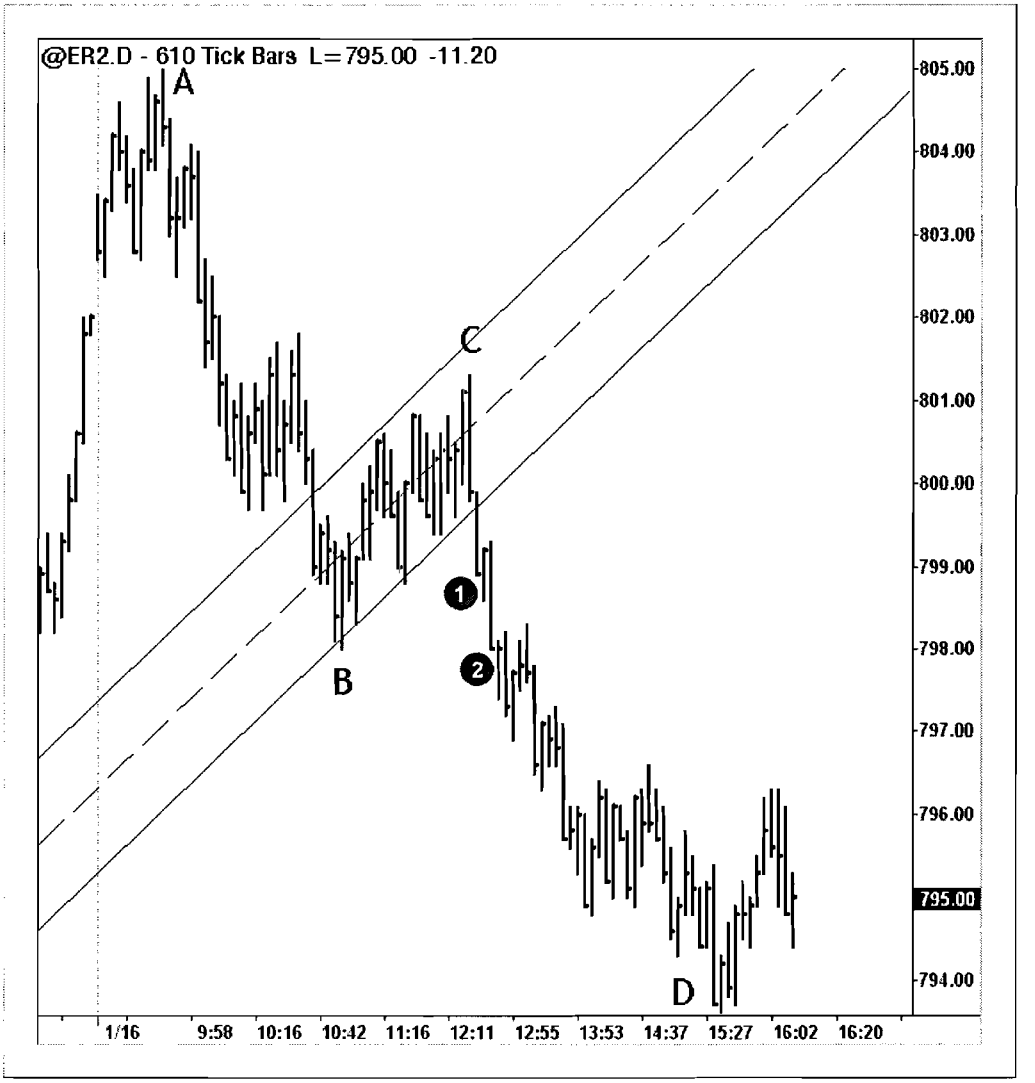
Target: The range prior to the LRC formation would be the target from the breakout or breakdown level.

Stop: Place a "stop" order 1 tick above the high of the LRC for "short" trades and 1 tick below the low of LRC for "long" trades.





Trading LRC

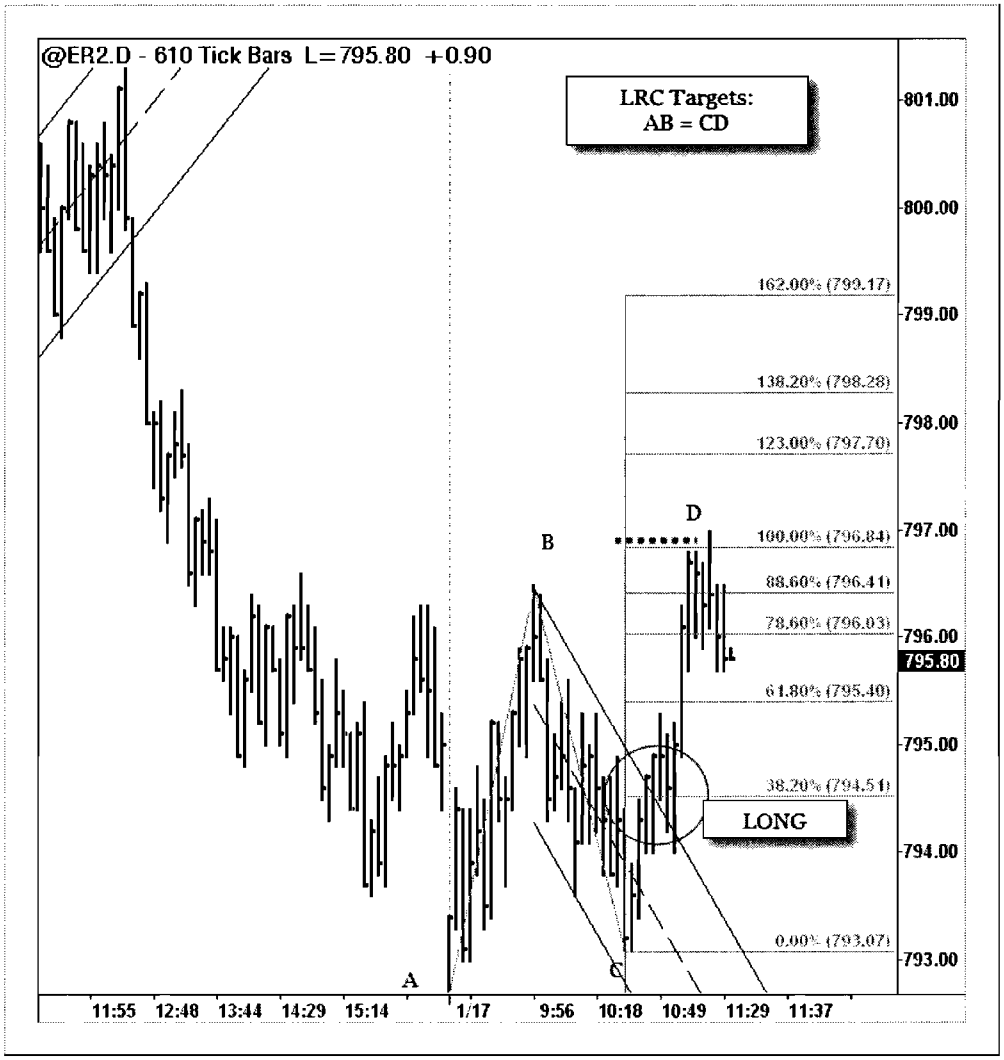


Trading Linear Regression Channel Breakdowns

The chart above shows a LRC pattern from the Russell Emini (ER2) 610 tick chart. On Jan. 16, 2007, ER2 sold off during the morning trade and closed near 798. At lunch hour, ER2 formed a LRC from 798 to 801 as prices tried to recover and traded higher. Around 12 pm, ER2 continued its prior down trend and closed below the LRC.

1. Enter a "short" trade below the low of the breakdown bar at 798.5.
2. Place a "stop" order to protect the short at 801.2.
3. The previous range prior to the LRC formation is set as the target range. The prior range is from 805 to 798. Subtract this range from level C at 801. The target is set at 794.

Trading LRC



Trading Linear Regression Channel Breakout

The example above shows a LRC breakout from the ER2 610 tick chart. On January 17, 2007, ER2 formed a LRC at about 11am, where prices closed outside the LRC signaling a long trade at 795.

1. Enter a "long" trade at one tick above the "high" of breakout bar at 795.
2. Place a "stop" order below the low of LRC at 793.
3. Set the target (previous range, AB=CD) at 797.

7.5. Andrew's Pitchfork

Andrew's Pitchfork Pattern

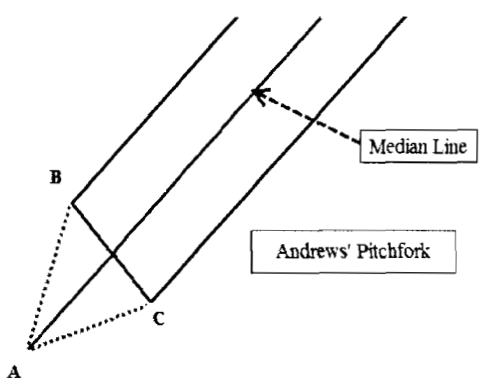
The concept of the "Pitchfork" pattern and its powerful trading method were first developed by Dr. Alan Andrews. "Pitchfork" and median line concepts work in all time-frame charts and in all instruments. Other "Pitchfork" theories were developed by Roger Babson and Timothy Morge.

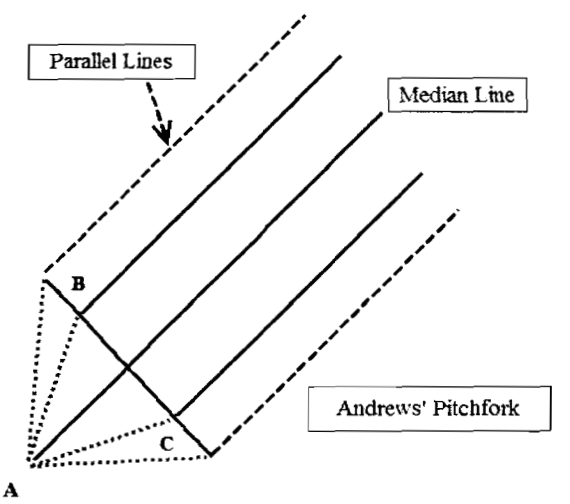
Andrews' "Pitchfork" consists of three "swing" pivot points, A, B, C and three parallel lines. Construction of the "Pitchfork" is relatively simple. Draw a line connecting B and C points. From A pivot point, draw a line connecting A to the mid point of B-C. The middle line-from A is called the "median Line." Draw parallel lines from B and C along the median line to form a "Pitchfork."

Trade: Dr. Andrews suggested that about 80% of the time, when trend is intact, prices gravitate towards the median line. Hence, when prices reach to the top trend line, take profits or short the market. Also, when prices reach the bottom trend line, enter a long position or close a short position.

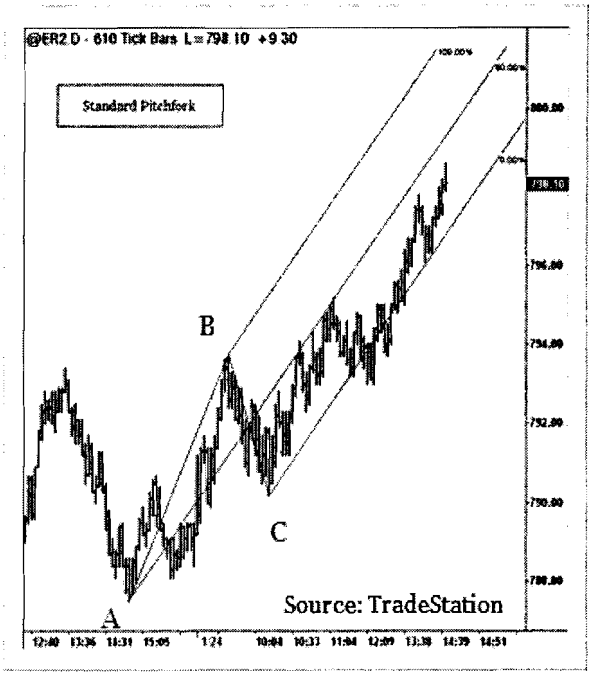
Target: The targets for "Pitchfork" are usually at the median line. If the price does not stop at the median line, it will tend to move to the lower trend line (for shorts) or move to the upper trend line in case of a "long" trade.

Stop: Pitchfork upper and lower trend lines act as the "stop" levels for trades. For "short" trades, place a "stop" order above the upper "pitchfork" line, Similarly, for "long" trades, place a "stop" order below the lower pitchfork line.





Pitchfork Types

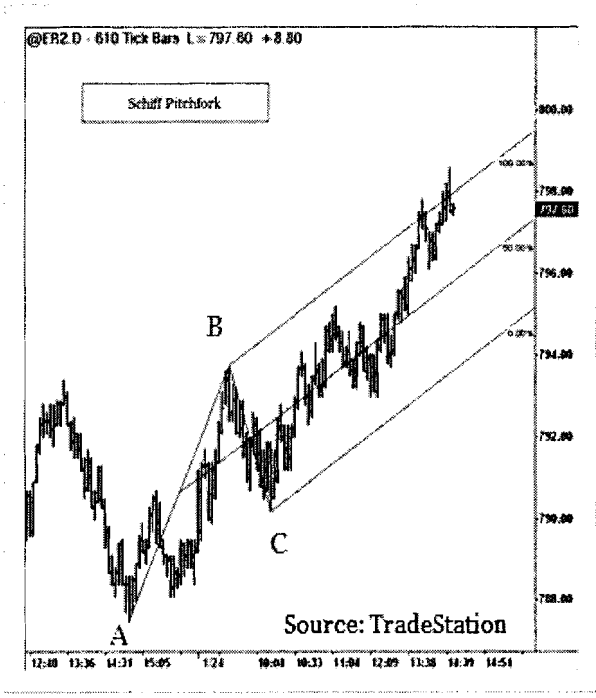


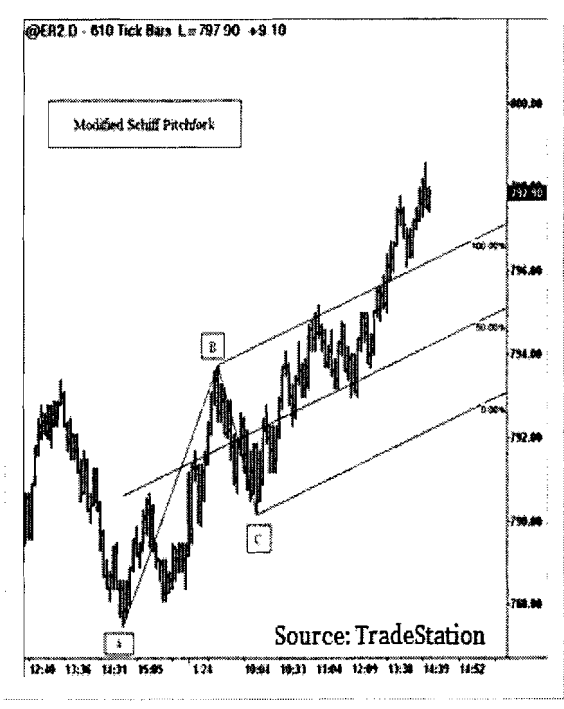
Here are a few variations of how to calculate a "Pitchfork."

Standard:
The median line is extended from A pivot point parallel to B and C pivot lines.

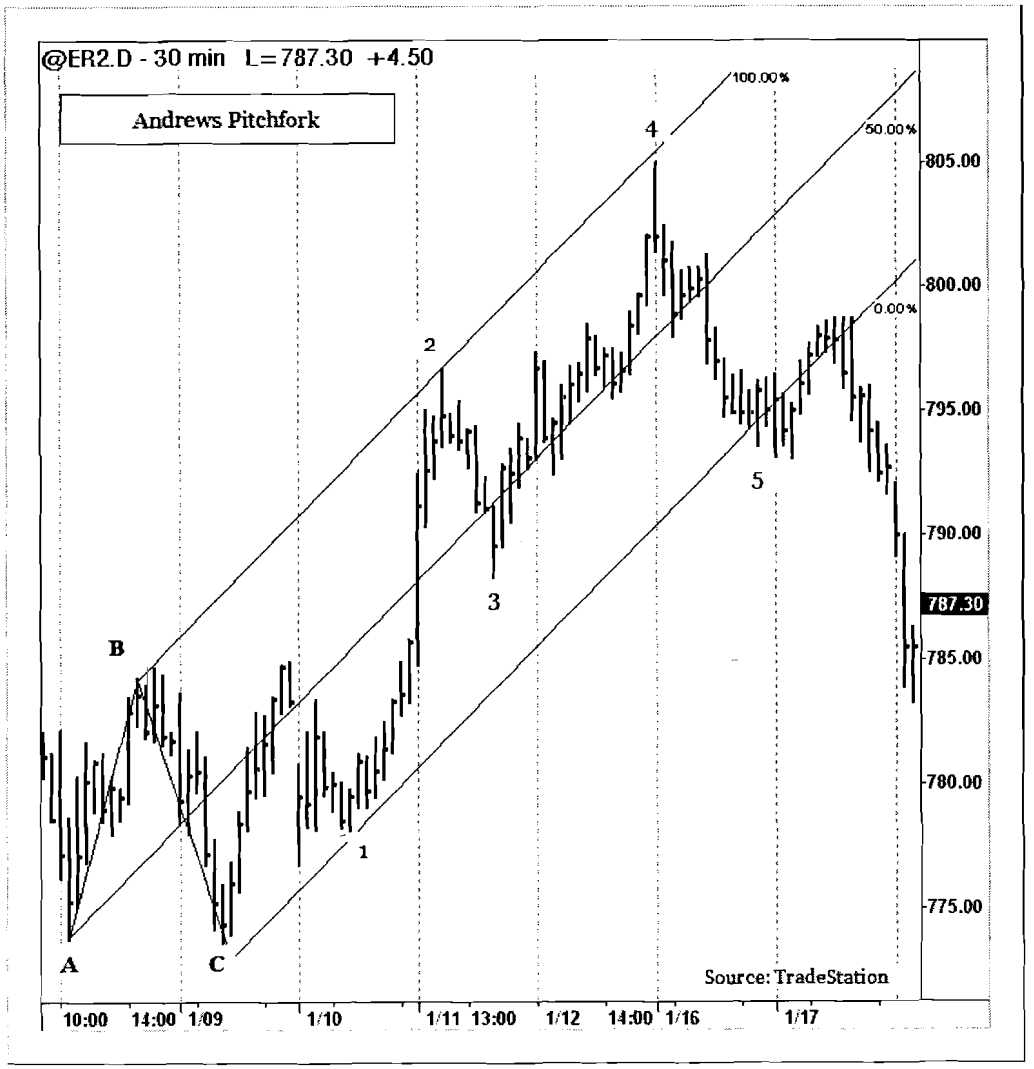
Schiff Method:
The mid point of A and B is used to draw the median line.

Modified Schiff:
A parallel line is drawn from the midpoint of A and B to B and C Pivot lines.





Trading Pitchfork



Trading Pitchfork Pattern

The example above displays a "Pitchfork" formation from the Russell Emini (ER2) 30 minute chart. The basic premise of "Pitchfork" trading is that prices trade from support to resistance in a channel format. In the example above, the "swing" pivots, A, B and C are identified and a "Pitchfork" is plotted to show the support and resistance areas. On January 10, ER2 reached the lower trend line support at 779. A "long" trade is triggered at 780 at point 1. A "stop" order was placed below the trend line. The first target is the median line at 788. ER2 rallied through the target level and closed at 796 (upper trend line). Next a "short" trade was triggered at point 4 at 805. A stop loss is placed at 807. The target was set at median line (at 799). This "short" trade continued to trade below the lower trend line (at point 5).

Chapter 8: Bands

8.1. Bollinger Bands

Bollinger Bands

"Bollinger Bands" were invented by John Bollinger, and are designed to identify price volatility using "standard deviation" around a simple moving average. As the volatility changes, these bands constrict and expand to give potential trade opportunities. "Bollinger bands" do not produce any Buy/Sell signals; however they help traders with other analysis techniques and indicators. The direction and width of "Bollinger bands" (%B) provide good trading ideas.

One of the techniques in trading "Bollinger bands" is when a new high/low price trade outside a band and subsequent highs/lows are falling inside the band. This occurrence may signal a price or trend reversal.

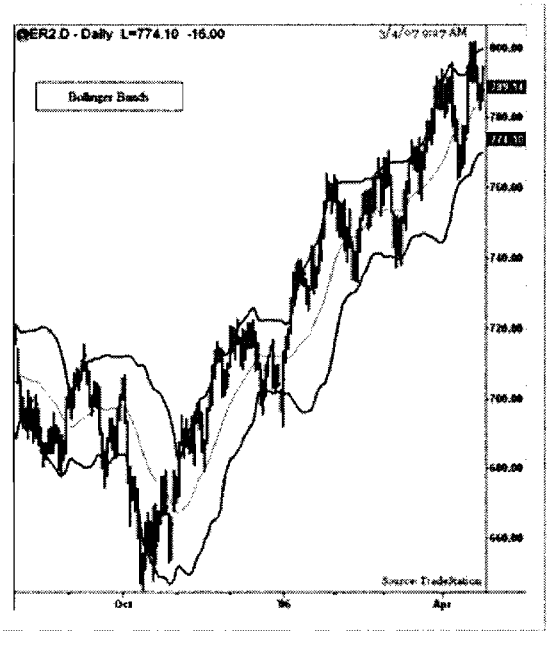
Another important technique of "Bollinger bands" is to compare the Bollinger bandwidth (%B) at key price levels. These bands constrict and provide an early warning signal before a big price change.

Traders use multiple "Bollinger bands" on multiple time-frames along with other momentum indicators. "Bollinger bands" dynamically change and provide a constant feedback to the momentum regarding the price and the direction of the trends. "Bollinger bands" are also used with other indicators to find trade opportunities.

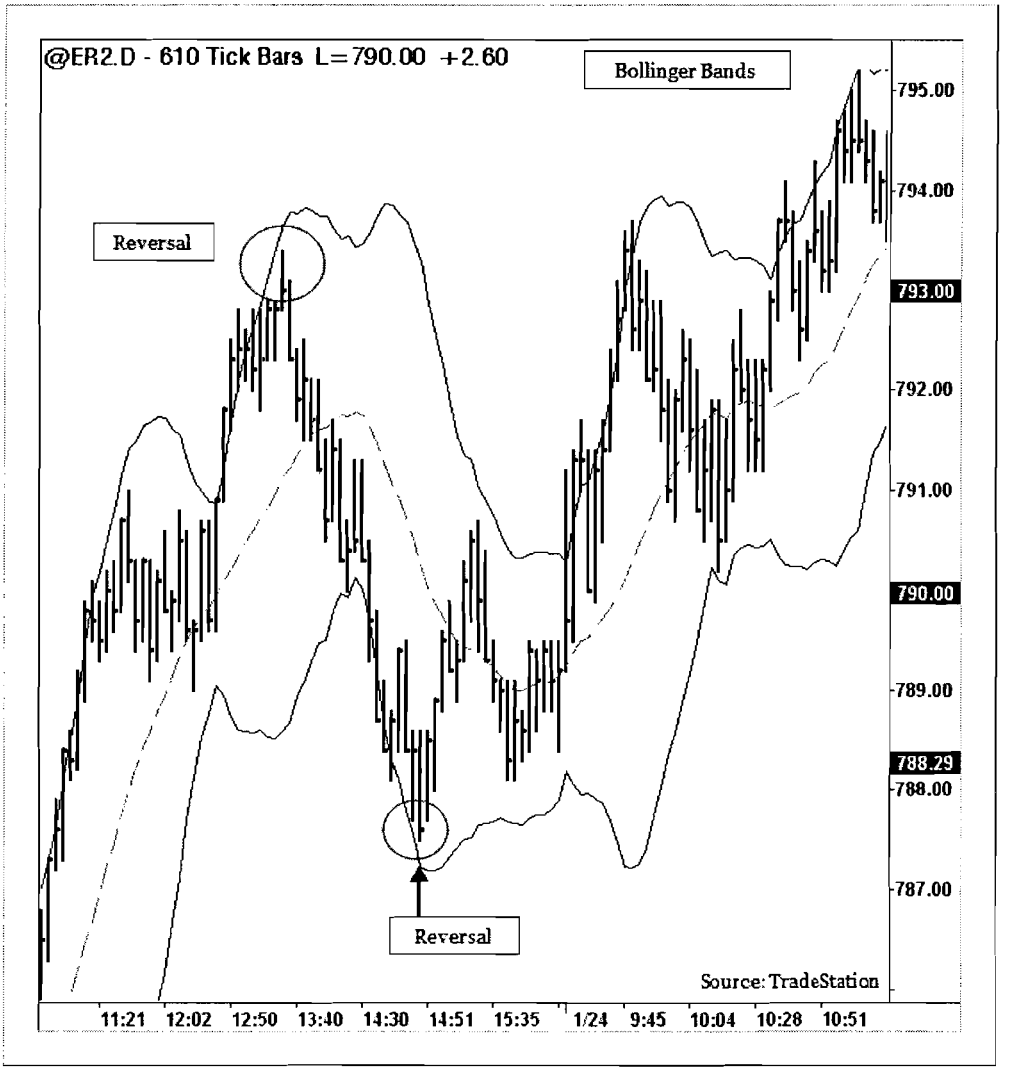
Bollinger Bands Construction

Bollinger Bands have three band like structures around a key simple moving average.

- Central: SMA (20 Periods)
- Upper : SMA + 2 Standard Deviations
- Lower : SMA – 2 Standard Deviations



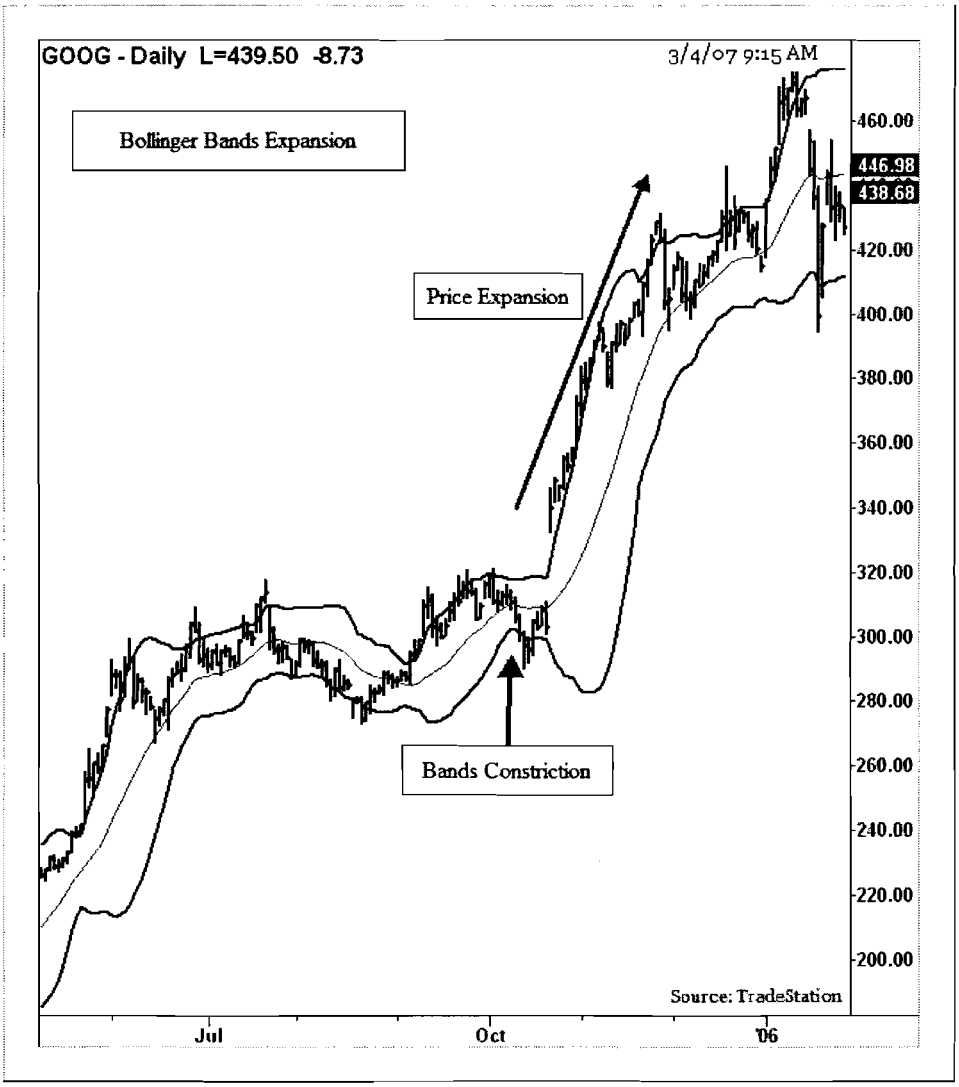
Trading Bollinger Bands



Trading Bollinger Bands

The example above illustrates a "Bollinger bands" trade setup from the Russell 2000 chart. On January 23, 2007, around 12.45 pm, the "Bollinger bands" expanded and made a new 20-bar high and pierced the bands outside of its price range. On subsequent highs, the price closed inside the bands to signal a potential trend reversal. At about 1.30 pm, the price reversed to test the lower bands. About 2.30 pm, the price made a 20-bar low and traded outside the bands. On subsequent trading, the price traded inside the bands to suggest a potential reversal to the upside. "Bollinger bands" trade setups can be traded along with other key technical indicator entry/exit signals.

Trading Bollinger Bands Squeeze



Trading Bollinger Bands

"Bollinger Bands" provide excellent feedback as their shape changes along with the price changes. They provide an early warning about "volatility" contraction and expansion. When prices trade in a consolidation range, the bands constrict (squeeze) and provide an early signal about an impending sharp price change. Price expansion makes the bands expand outward and provide a volatile shape and suggest that prices may trade outside the bands until the "volatility" returns to the norm within the bands.

The example above shows GOOG price chart with "Bollinger Bands." In mid October 2005, the Bollinger bands contracted to suggest an impending move. After bands expansion, prices reached new highs. Trades are taken in the direction of the breakout form bands contraction.

8.2. Keltner Bands

Keltner Bands

"Keltner Bands" were first revealed from the book,"*How To Make Money in Commodities*" by Chester Keltner. "Keltner Bands" look similar to "Bollinger bands" and are computed using a single moving average with a fixed width envelope using Average True Range (ATR). The center line is the 10-period average of "high," "low" and "close" prices. The outer bands are constructed using a 10-day ATR. For a "lower" band, a 10-period ATR is subtracted from the 10-period Pivot MA and for "upper" band, A 10-day ATR is added to the 10 period Pivot MA. Trading signals are generated when prices reach outside the bands as prices may be out of the normal trading ranges and potentially may retrace back to the normal prices.

Linda Bradford Raschke, later developed various theories and added modifications for Keltner Bands using different exponential moving averages and Average True Ranges.

"Keltner Channel" trading is a trend based system method and only suitable for trending markets and fail in congestion or side-ways markets. "Keltner Bands" can be effectively used along with other indicators and patterns.

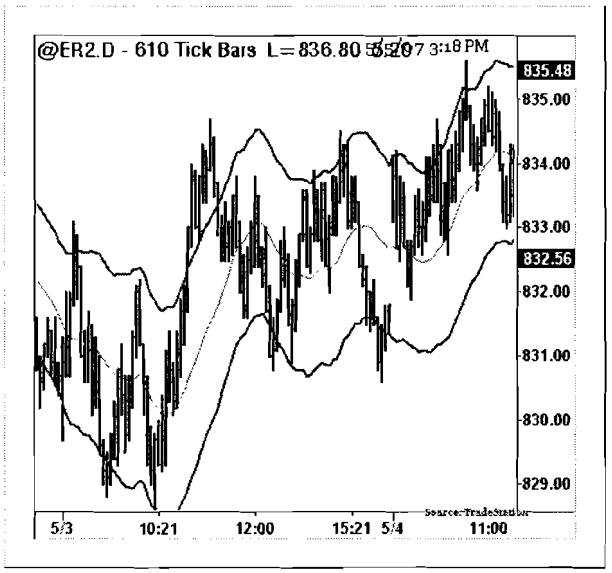
Another way to use "Keltner Bands" is to trade in the direction of the trend. When prices close above the upper band, it may signal strength and prices may continue to rise. Similarly, when prices close below the lower band, it may signal weakness and prices may continue to fall. When prices retrace back into the bands, the prior trend may signal a reversal.

Overall, "Keltner Bands" are like "moving average envelopes" or "Bollinger bands." The trading principles are similar except they are computed differently.

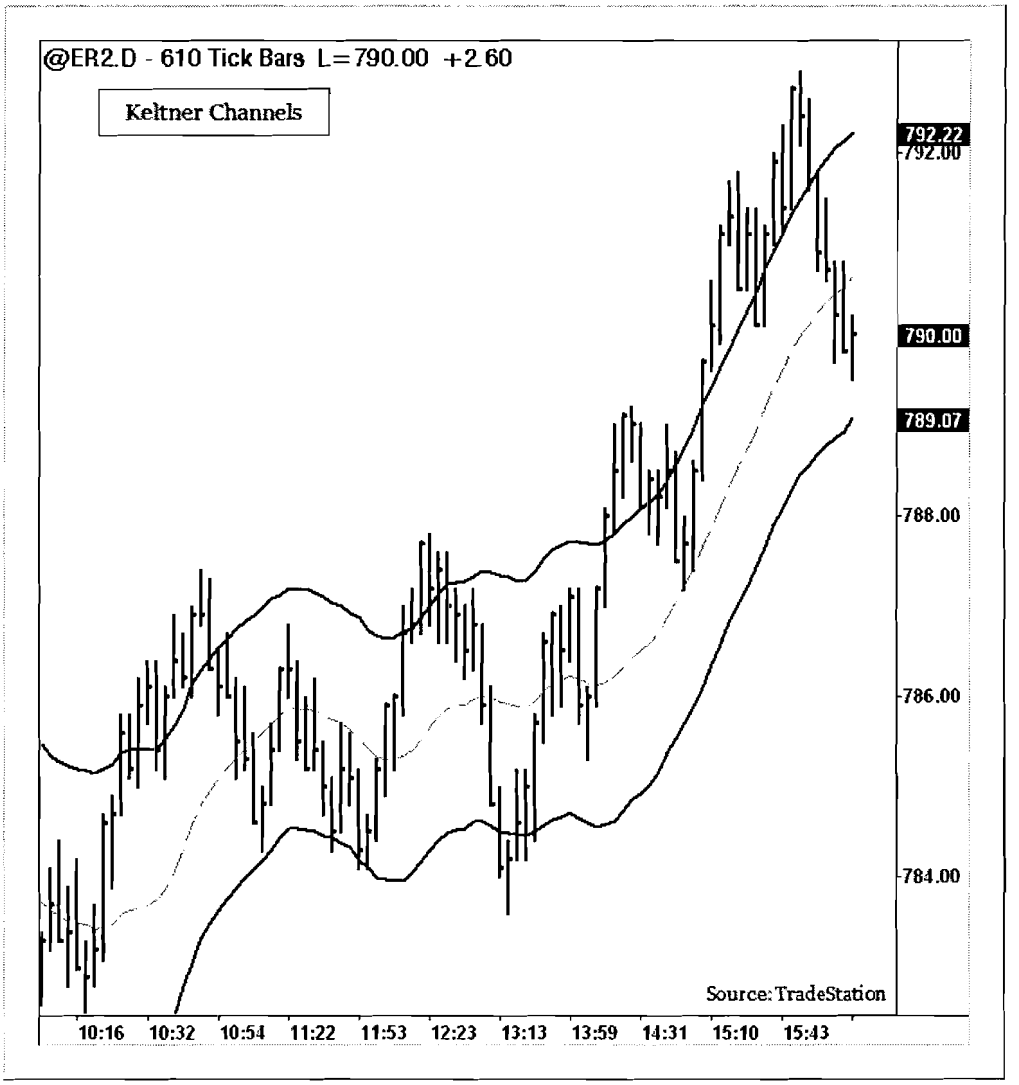
Keltner Bands Calculations

Pivot: (H+L+C)/3
ATR = Average(TrueRange, 10);

Middle Band: Pivot MA = MA(Pivot, 10);
Upper Band : Pivot MA + ATR (10);
Lower Band : Pivot MA – ATR(10);



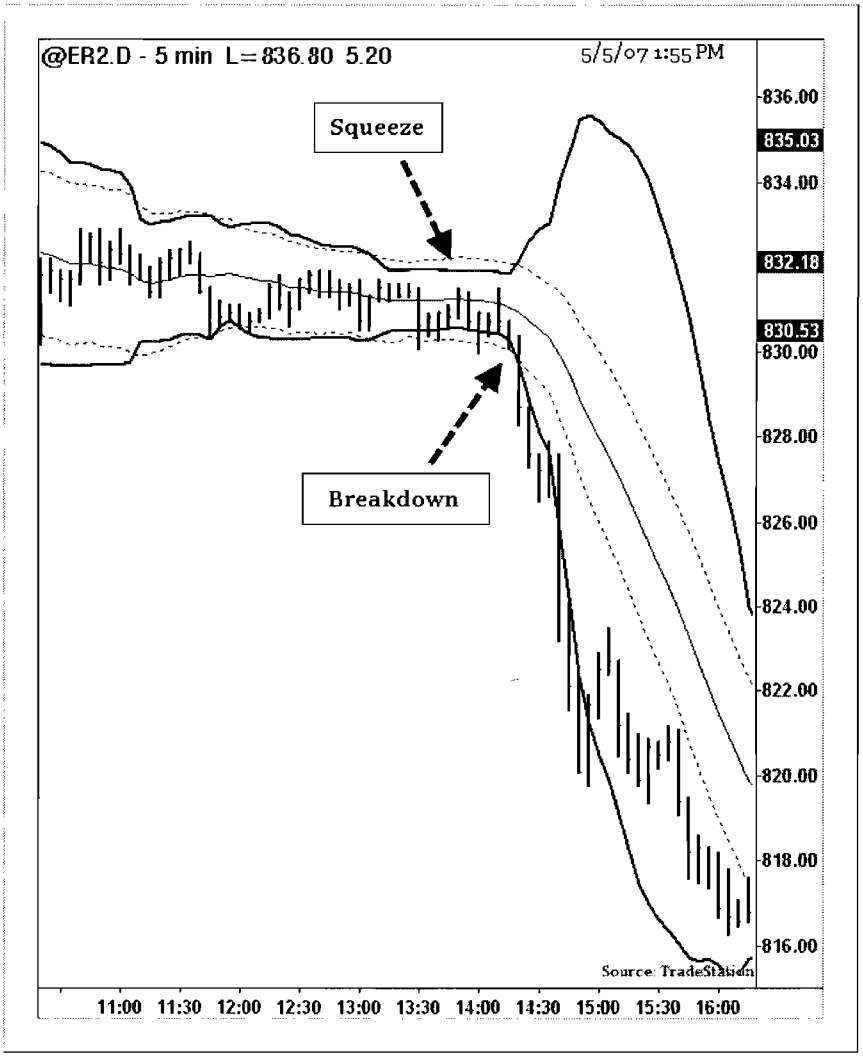
Trading Keltner Bands



Trading Keltner Bands

The example above shows "Keltner Bands" trading system from the Russell 2000 Emini chart. The middle band is represented by A 10 period Moving Average of Keltner average price (H+L+C)/3. The upper band is computed by adding 10-period average of ATR to the middle band. The lower band is computed by subtracting a 10-period average of ATR from the middle band. "Keltner Bands" Trading System includes buying when the markets penetrate the upper band and selling when the markets penetrate the lower band. A "stop" order is placed at the middle band to protect the trade. "Keltner Bands" are very effective in trending markets and should be avoided in side-ways or congestion zones.

Trading Keltner & Bollinger Squeeze



Trading Keltner Bands with Bollinger Bands Squeeze

The example above illustrates "Keltner Bands" and "Bollinger bands" trade setup from the Russell 2000 Emini chart. A 21 period Bollinger bands with a 2-Standard Deviation indicator and a 10 period Keltener channel with an average of a 10 period ATR is plotted. This trade setup shows volatility contraction within a trading channel as Bollinger bands squeeze inside the Keltner channel. On April 30, 2007, at about 1:30 pm, Bollinger bands squeezed inside the Keltner Bands to suggest a contraction of volatility and potential expansion move. When Bollinger bands break out of the Keltner Bands to the downside, a "short" trade is entered at the 830 level. By the end of the day, Russell 2000 closed near 816; 14 points from the entry.

8.3. Fibonacci Bands

Fibonacci Bands

Fibonacci Bands are derived from Fibonacci ratios expansion from a fixed moving average. These bands help traders find key areas of support and resistance. "Fibonacci bands" are computed by adding a Fibonacci ratio distance (Up and Down) from a "key moving" average (21, 34, 89 periods). An 8 period average of "True range" is computed. The multiples of Fibonacci ratios of this range are added to the fixed moving average to compute Fibonacci Bands (Fib. Bands formulas are provided below).

One of the best ways to find trend reversals is to watch the price action near the extreme bands (both lower and higher). Markets tend to reverse when prices trade outside of the band for a few bars and again trade inside the bands. After reversals, markets also tend to trade from one extreme band to the other end (opposite) of the extreme bands.

In my view, the best results can be obtained from using multiple time-frames for the same instrument. Fibonacci Bands indicator may be used along with the other indicators. When shorter time-frames signals are aligned with a larger time-frame trade signals, the Fibonacci Bands signals and the market may be in sync. Trades are usually taken in the direction of a larger time-frame. The "short-term" band support/resistance areas are used for "entry" and "exit" setups. During market rallies, utilize exhaustion or trend based market indicators along with Fibonacci Bands. During congestion zones use non-momentum based indicators for better results.

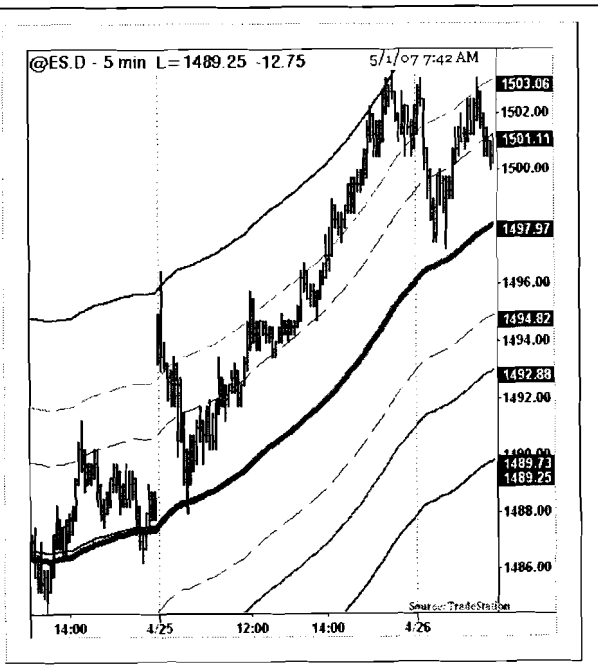
Computing Fibonacci Bands

- MA = Exp. Moving Avg. (Close,34);
- TR = Exp. Average(TrueRange, 8);

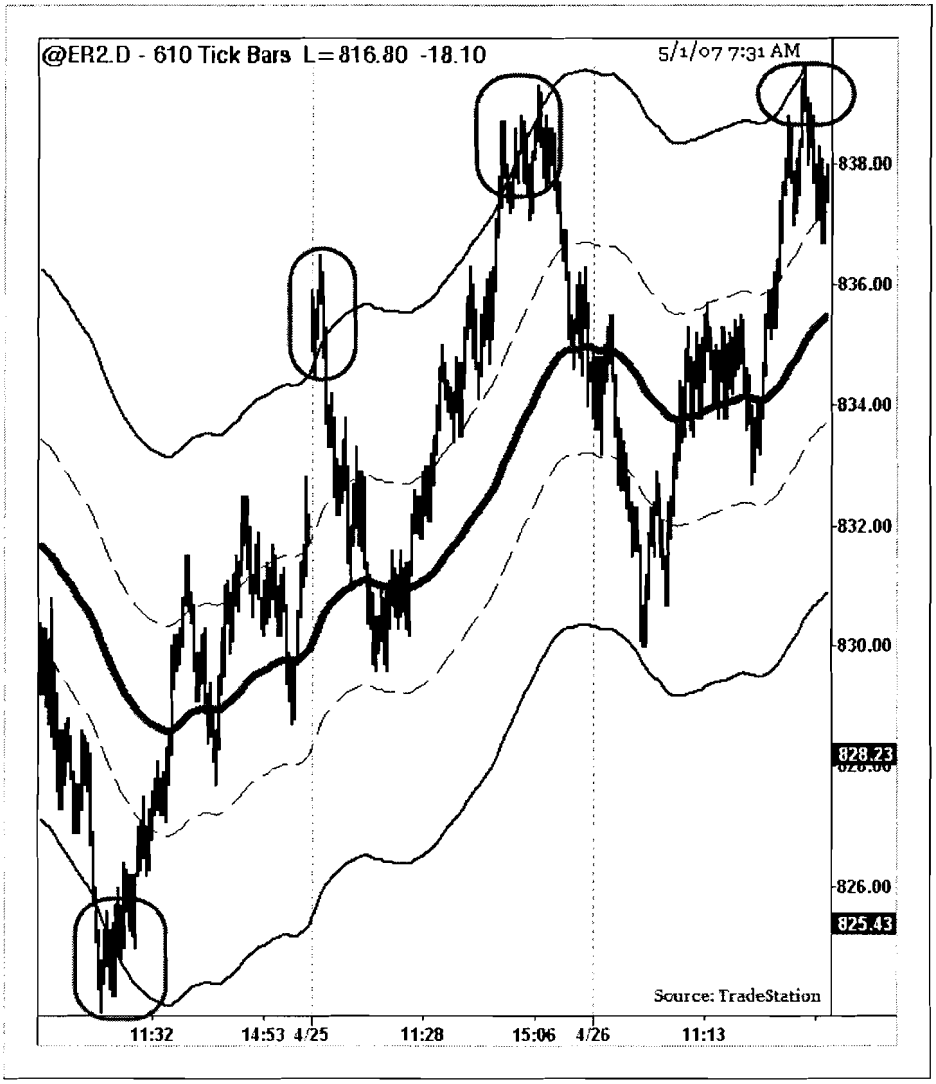
- UpperBand3 = MA + 4.23*TR;
- UpperBand2 = MA + 2.62*TR;
- UpperBand1 = MA + 1.62*TR;

- Moving Average (MA);

- LowerBand1 = MA - 1.62*TR;
- LowerBand2 = MA - 2.62*TR;
- LowerBand3 = MA - 4.23*TR;



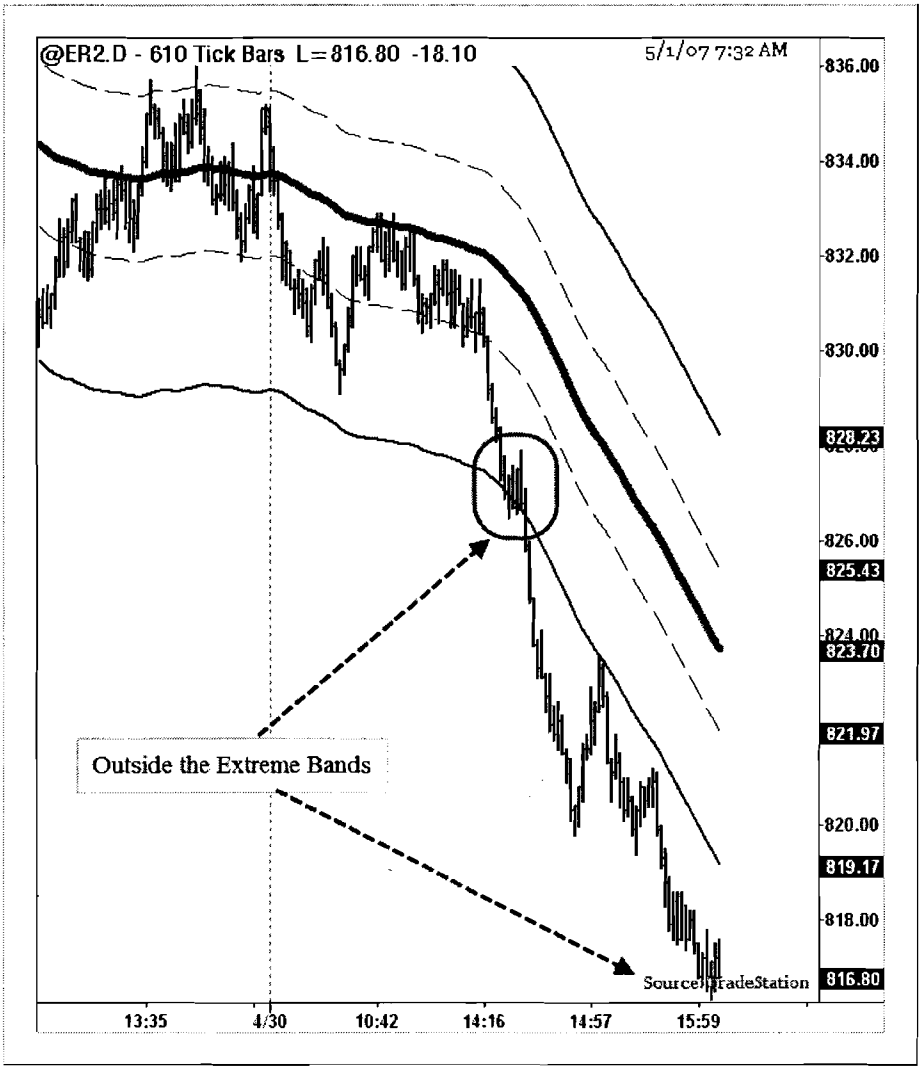
Trading Fibonacci Bands



Trading Fibonacci Bands

The example above shows Fibonacci Bands plotted from the Russell 2000 Emini 610 tick chart. The middle line shows the 89 period moving average and 1.62 and 4.62 Fibonacci Bands (Upper and Lower). Trades are only initiated in the direction of market reversals. On April 24, 2007, the markets sold-off in the morning session and traded in a steep price decline. At about 11.30 am, the price closed outside the Fibonacci's extreme lower bands and signaled a potential reversal. When prices are traded inside the band, enter a "long" trade 1 tick above the high of the previous bar. Place a "stop" order below the low of the recent "swing low" outside the Fibonacci Band. Targets can be set using the moving average (89 periods) and extreme band range.

Trading Fibonacci Bands



Trading Fibonacci Bands

The example above shows Fibonacci Bands from the Russell 2000 Emini 610 tick chart. On April 30, Russell 2000 (ER2) experienced weaker markets and traded below the moving average (Center Line). At 2.30 pm, the price closed outside the Fibonacci Bands to signal a potential reversal. Subsequent bars have not produced any trades as the price did not close above the high of the break-in bars for a reversal. Price also quickly traded outside the extreme Fibonacci Bands to signal further weakness. Upside trade reversals did not occur until the price re-enters the band. Traders can use Fibonacci Bands to effectively find key entry and exits based on the trend reversals occurring near these extreme bands.

Chapter 9: ZigZag

9.1. ZigZag Patterns

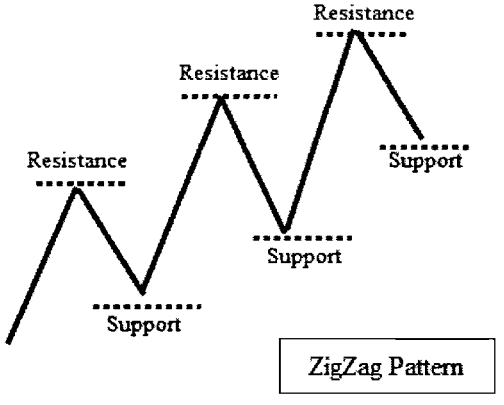
ZigZag Patterns

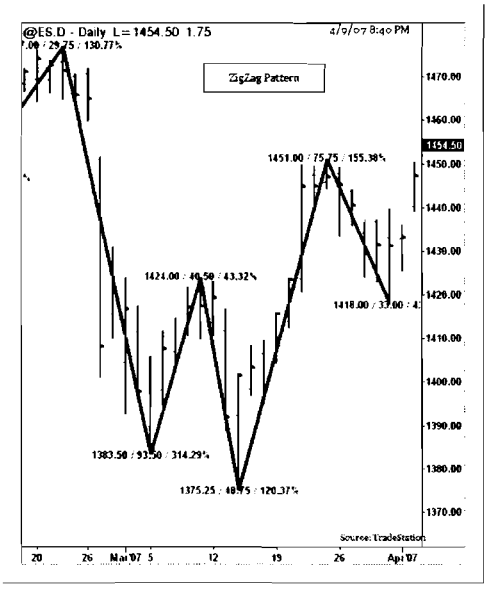
Market prices move in a non-linear format and form "peaks" and "troughs" to signal the end-of-trends and the begin-of-trends. Connecting these "peaks" and "troughs" generate a pattern called "ZigZag," which are used in Elliott Waves to detect various waves, using Fibonacci retracement to detect "price" clustering sequences. "ZigZag" patterns are also used to detect price patterns like "M" and "W" patterns. The construction of "ZigZag" patterns includes finding the key peaks and troughs with pivots and determining the "ZigZag" leg lengths, elapsed time and bar count. "ZigZag" patterns are eye pleasing and tempting but they provide no predictive analysis by themselves. They can be coupled with pattern recognition techniques or some other theories like overlaying on Renko charting to assist with trading.

"ZigZag" patterns do help filter out noise and compare each leg's size with previous swings to get trend strength. The "ZigZag" patterns use certain variables to validate the pattern such as minimum price movement for points or a percentage, and Average True Range for volatility measurement and "pivot" strengths.

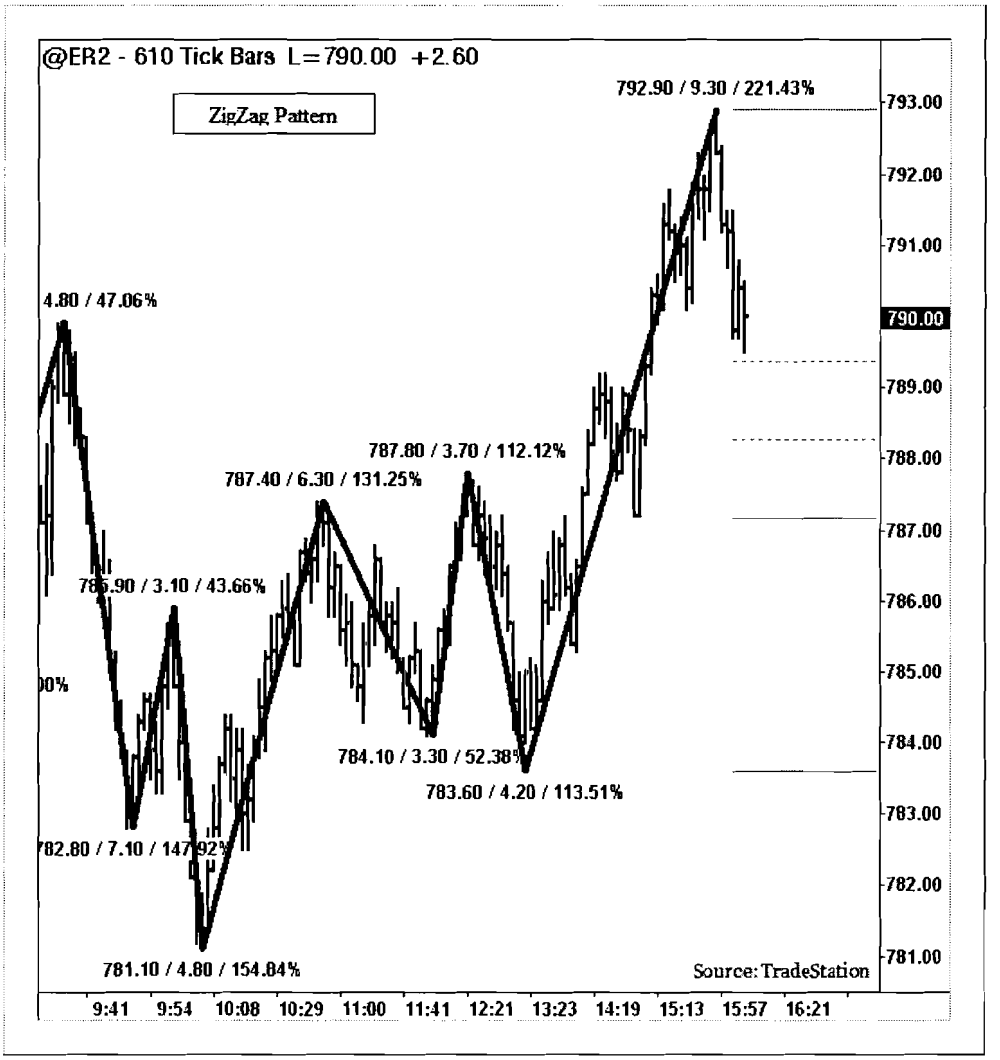
"ZigZag" patterns are used for price cluster generation to determine potential support and resistance areas. They are automatically drawn on charts to plot Fibonacci ratios for prior swings. J.D. Hamon and Michael Gur have published some theories about "ZigZag" and "Symmetric wave" theory trading.

Because "ZigZag" patterns are used only for trend indicators, there are no specific trading rules are provided.





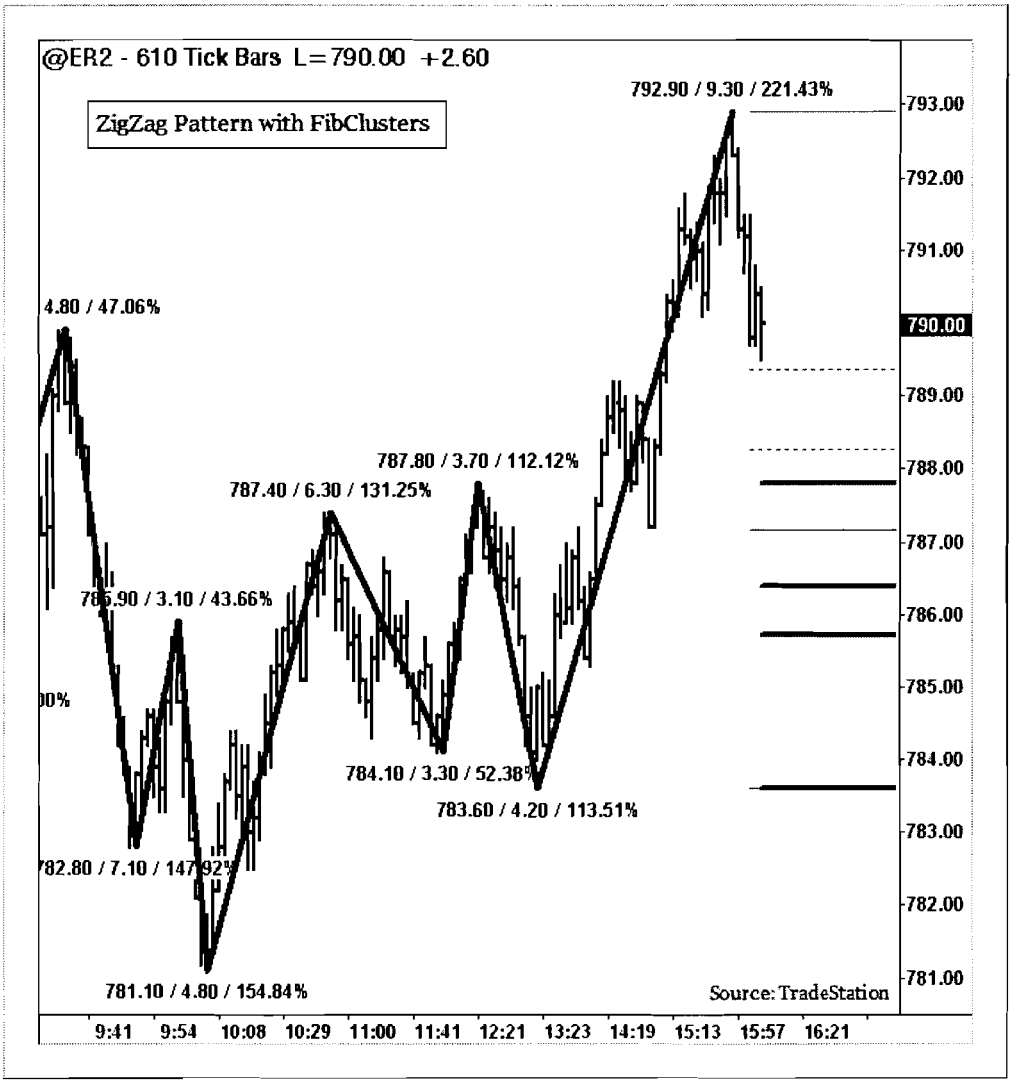
Trading ZigZag Pattern



Trading ZigZag Pattern

The example above illustrates a "ZigZag" pattern from the Russell Emini chart. This chart uses an Average True Range of 10 bars to determine the minimum "ZigZag" move required to compute the trend directions. At each "peak" or "trough," the number of points or price movement in each swing and the retracement percentage is plotted. For the last swing, the Fibonacci retracement levels are plotted to spot potential support and resistance areas.

Trading ZigZag with Fib. Clusters



Trading ZigZag FibClusters

"ZigZag" patterns do not have any predictability nature. They demonstrate the relative price movements and elapsed time to help other patterns or wave counts. However, there may be some price levels in each swing that could be important support and resistance levels. These price levels can be detected using Fibonacci price clustering methods, where each level is grouped with other price points within a price threshold. These clusters act as attractive support/resistance points for trading. In the chart above, price clusters are auto plotted using the ZigZag swings and a Fibonacci price clustering algorithm to point potential support and resistance areas (plotted horizontal lines on the right side of the chart).

9.2. Elliott Wave

Elliott Wave Pattern

In the late 1920's, Ralph Elliott discovered that markets have a rhythm and markets travel in a series of wave patterns. Elliott suggested markets move in 5 strength wave (impulse) and 3 correction waves.

The Elliott Wave theory is complex and is very subjective for each trader. This pattern occurs in all markets and in all time-frames. The Elliott Wave has few complex rules. The wave patterns are briefly described below:

Wave 1 (W1): The smallest of the Elliott waves and the start of the "fractal wave" pattern.

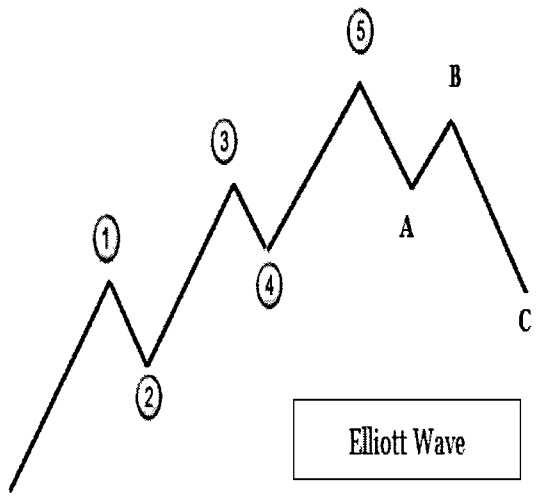
Wave 2 (W2): A retracement wave. Wave 2 should not trade below lows of Wave 1.

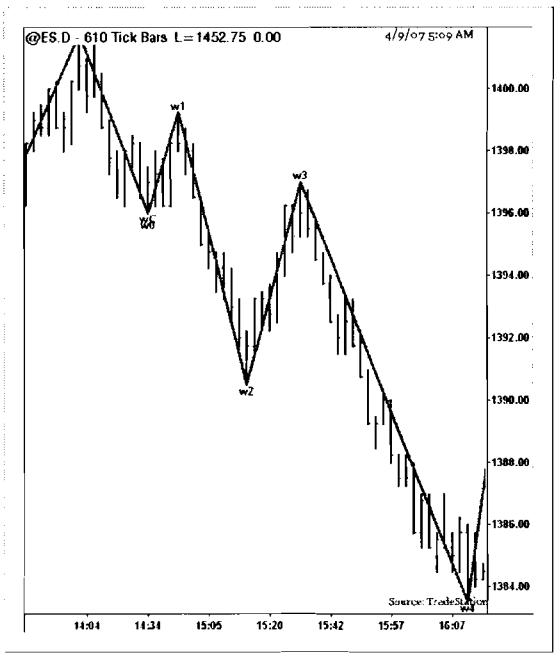
Wave 3 (W3): Longest and strongest of the entire wave count. Must trade above the "high" of Wave 1.

Wave 4 (W4): Usually called the "profit wave." Traders, who came in at Wave 1, will take profits. Wave 4 does not trade below Wave 2's high.

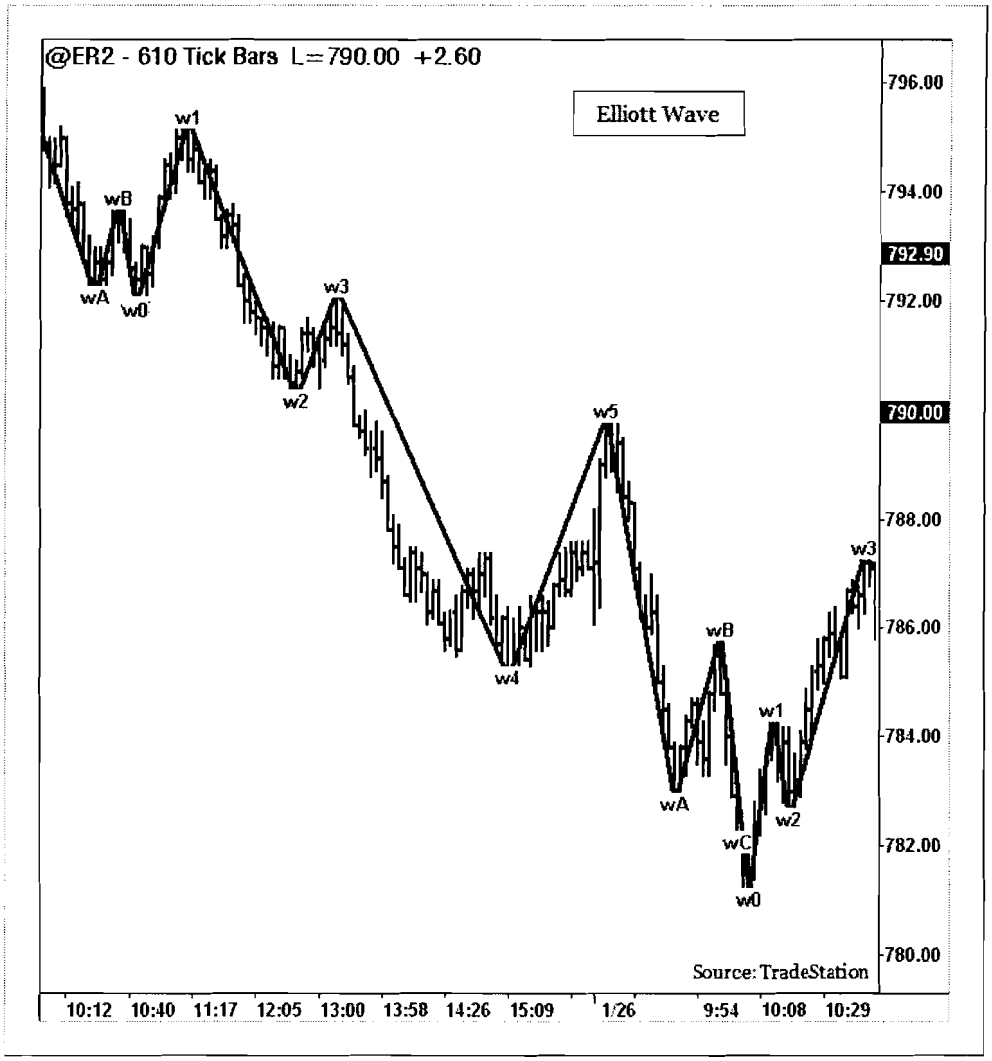
Wave 5 (W5): Also called "greed wave" or "overpriced wave." Exhaustion price movements occur before a serious correction.

After 5 wave patterns, markets form an ABC pattern in a three corrective waves fashion before another series begins.





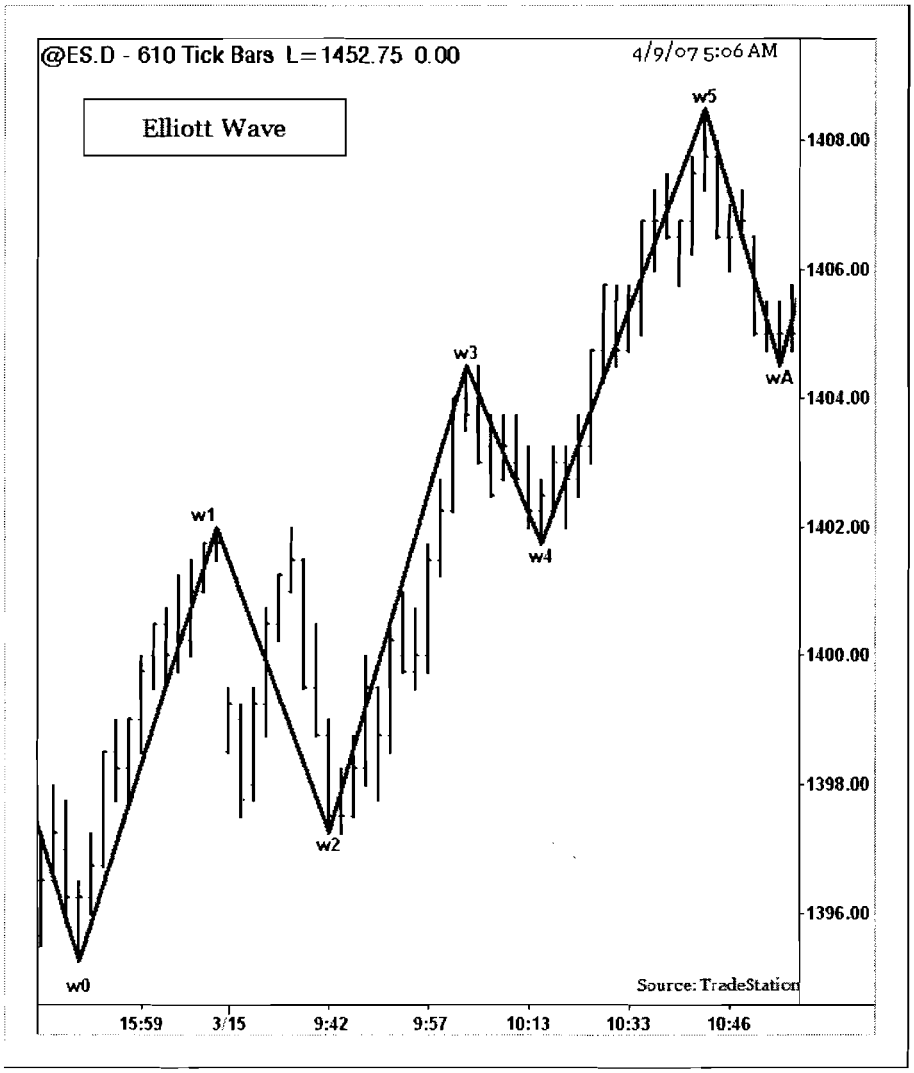
Trading Elliott Wave Pattern



Trading Elliott Wave Pattern

The basic Elliott Wave theory dictates that markets move in waves in the direction of primary trends. There will be 5-Action and 3-Reaction waves to complete a cycle. There are many variations and key aspects of these waves. However, the main concept is 5 "waves" up/down followed by 3 down/up cycles. Wave ranges can be determined by Fibonacci numbers for time/price ranges. Some traders plot "wave" channels to determine the "entry" and "target" areas. The Elliott Wave theory is very subjective and requires a very careful understanding of the entire wave theory thesis to be successful.

Trading Elliott Wave Pattern



Trading Elliott Wave Pattern

The Elliott Wave suggests that markets are always in progress and they correspond to 5 "up waves" and 3 "down waves" in a trend direction of "up or down." The above chart shows major waves consisting of smaller, minor waves in each. Trading Elliott Wave is not very easy. Nevertheless, when the rules are noted and the key origin wave (W0-W1) is found, then Elliott trading could be carefully applied. The example above illustrates an Elliott Wave from S&P 500 futures chart. Once W1 is identified, look for a retracement to W2. Most Elliotticians trade W3 and W5 as their identification becomes easier to follow and establish fixed rules. W3 is the longest wave. The W4 retracement stops above W1. W5 will be an extension wave of W3. There are many other Elliott Wave trading rules that can be found in other trading books and websites.

9.3. Crown Pattern

Crown Pattern

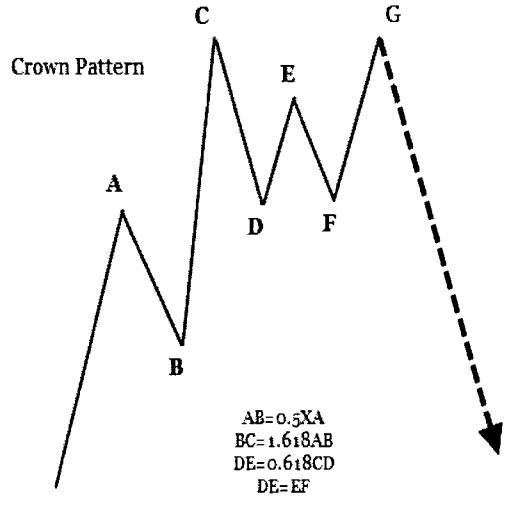
"Crown" patterns are a variation of skewed "Head and Shoulders" patterns, and they incorporate Fibonacci ratios in its formation. "Crown" patterns form at the end of market rallies or market declines suggesting a major trend change. As the name suggests, "Crown" patterns look like a series of "spikes" formed with Fibonacci ratios compared to prior swings.

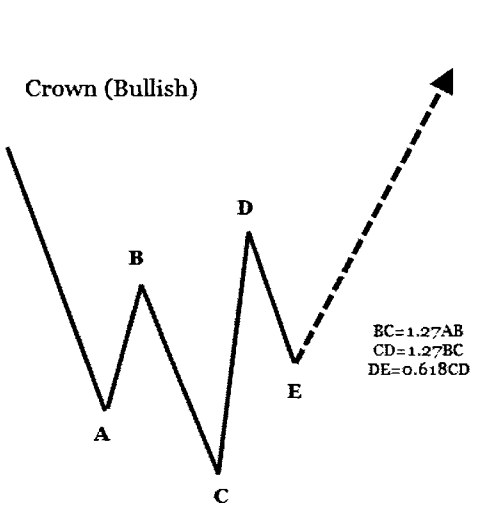
"Crown" patterns form in all markets and in all time-frames. They are moderately reliable, but need confirmation to trade. Occasionally, "Crown" patterns form multiple spikes like "ZigZag" in a short span of time before the pattern really emerges out of the channel.

Trade: "Crown" patterns have similar trading opportunities as "Head and Shoulders" patterns with few Fibonacci based rules. In bearish "Crown" patterns, trade setup is made below the low of the recent "swing low" and a "stop" placement is set above the recent "swing high." In bullish "Crown" patterns, trade setup is made above the high of the recent "swing high."

Stop: For short trades, if the market rally takes above the high of the pattern, the "Crown" will fail. Place an order 2 ticks above the "swing high" of the pattern. For long trades, reverse the previous criteria.

Target:
The "Crown" patterns are profitable and can be trailed with a 2-bar high for "short" trades and a 2-bar low for "long" trades. Set profit targets at major "swing lows" and major "swing highs."





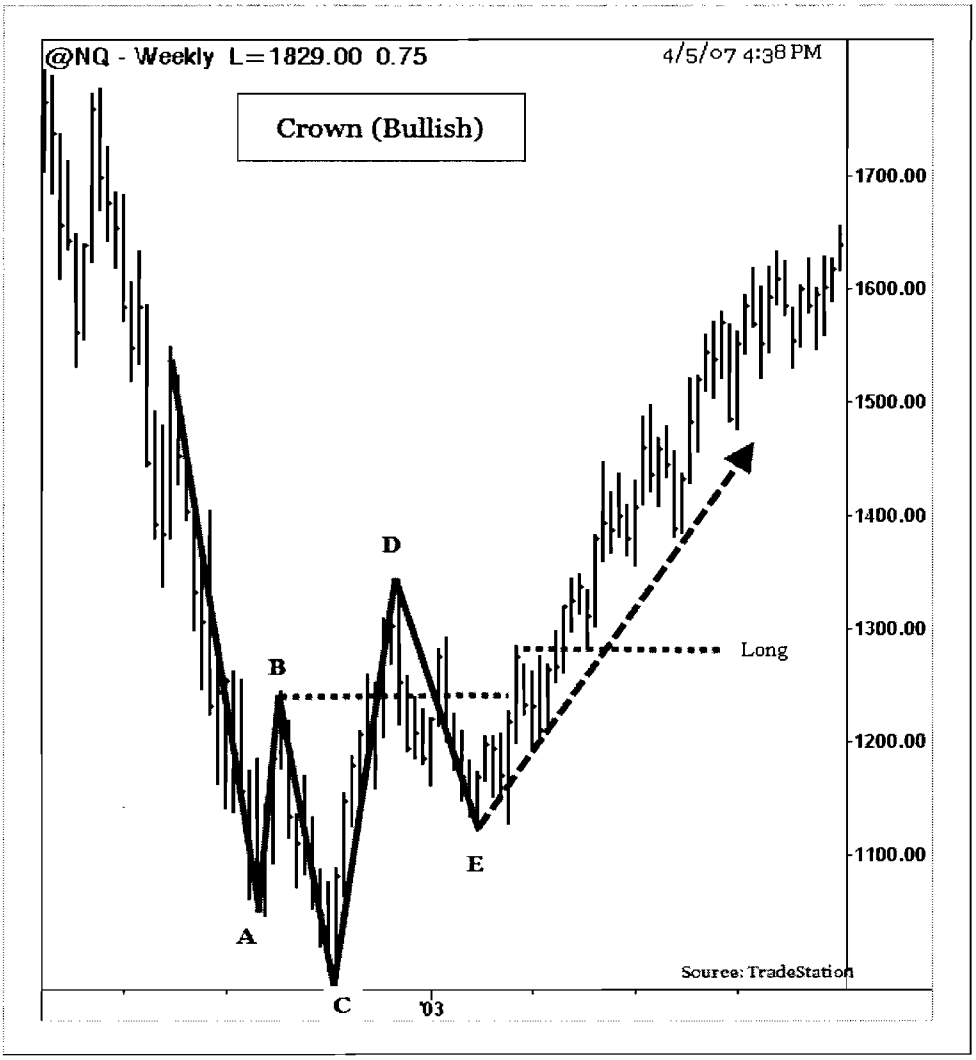
Trading Crown (Bearish) Pattern

Trading Bearish Crown Pattern

The example above illustrates a "Crown" pattern from the Russell 2000 EMini futures chart. On April 04, 2007, during the morning session, ER2 traded higher and formed a "Crown" pattern based on Fibonacci ratios. The pattern continued its down trend after trading below recent "swing low" at 817. After a series of spikes, a "short" signal was triggered below the first "swing low" at "D" level.

1. Enter a "short" trade below the low at "D" level (817).
2. Place a "stop" order above the "E" level at 818.7
3. Target a major "swing low" prior to the "Crown" pattern formation at "B" level.

Trading Crown (Bullish) Pattern



Trading Crown (Bullish) Pattern

The example above illustrates a "Bullish" crown pattern from the Nasdaq futures (NQ) weekly chart. NQ made series of Fibonacci based swings to form a "Crown" pattern. The swing BC is 1.27 of AB and CD is 1.27 of BC and DE is 0.618 of BC. After series of spikes, look for a trend reversal to close above the first "swing high" at B.

1. Enter a "long" trade above level "B."
2. Place a "stop" order below the low of recent "swing low" at E.
3. Target a "major swing high" prior to the "crown" pattern formation.

Chapter 10: Price-Action

10.1. Cup and Handle Pattern

Cup and Handle Pattern

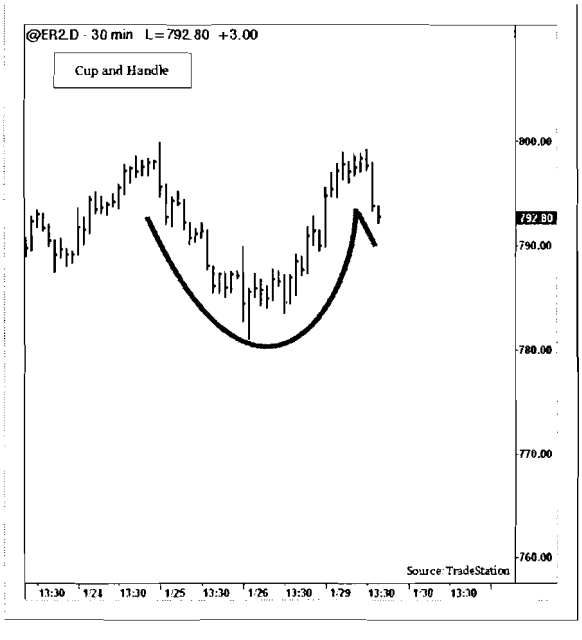
"Cup and Handle" is a continuation pattern that usually forms in bullish markets. Most "Cup and Handle" patterns are very reliable and offer great trading opportunities. "Cup" formation is developed during price rallies from the round bottom. The "Handle" part forms due to a price correction before a clear breakout to the upside.

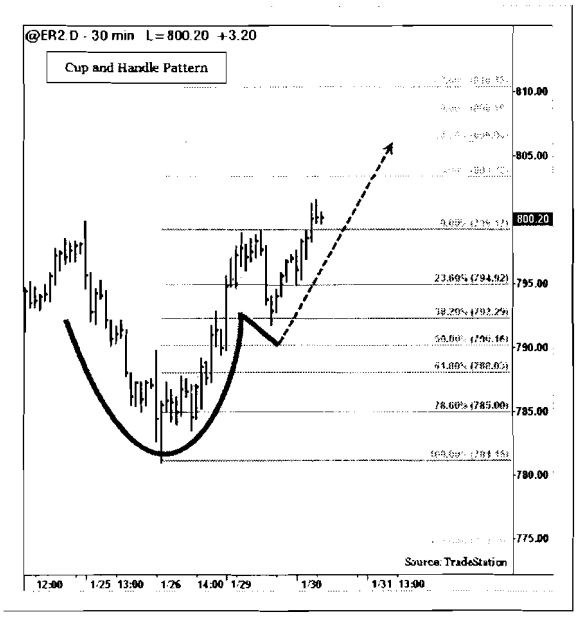
Trading "Cup and Handle" pattern is a two fold process. First a "Handle" can be traded as a corrective pattern and secondly as a continuation pattern (of the prior trend) after a breakout from the top of the "Cup." The handle part (right side) usually corrects about 25% to 38% (of depth of the Cup) from the high pivot point to the bottom of the Cup. After the correction (handle), the pattern will pick its prior trend and trade in a breakout fashion above the 'top' of the 'Cup'.

Trade: The best trading opportunity is generated when the price clears the top of the "Cup." A "long" trade is entered when the price closes above the high of the cup.

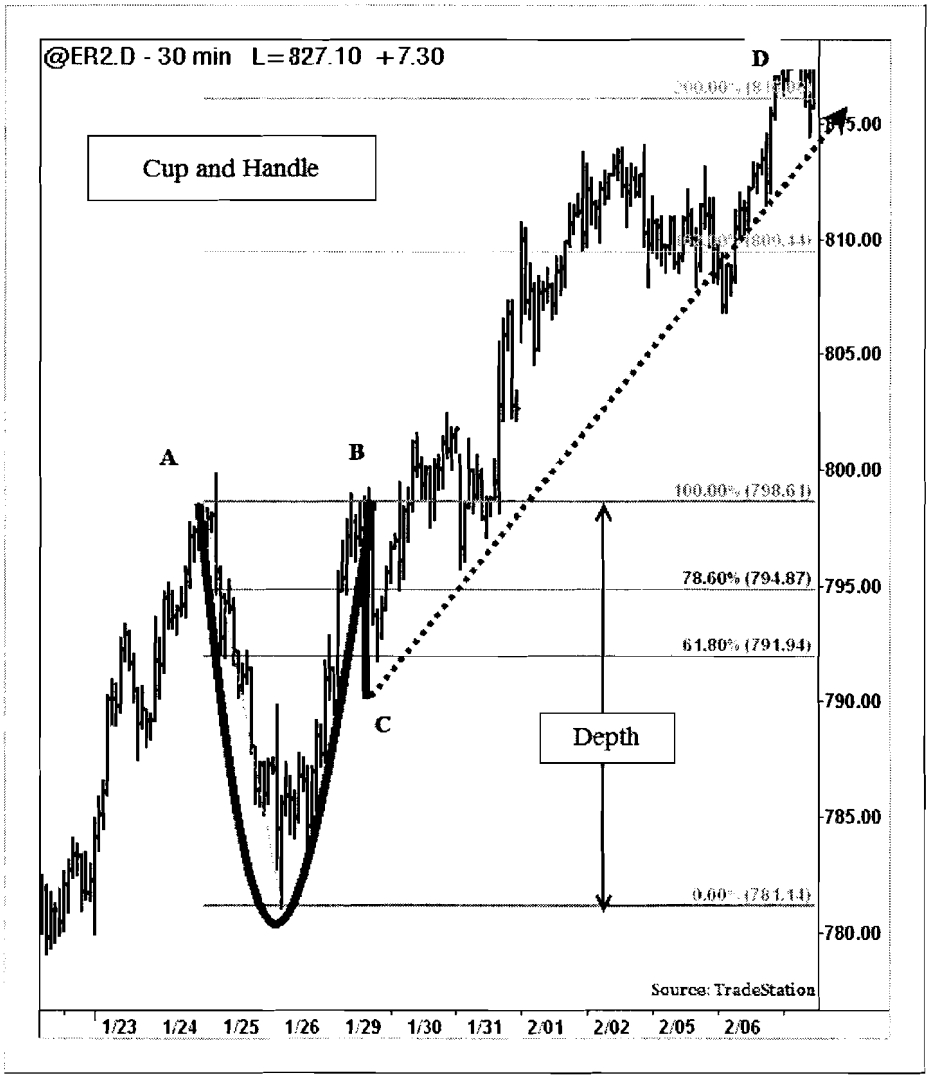
Target: Most "Cup & Handle" patterns result from 62% to 100% the depth of the "Cup" from the breakout levels.

Stop: Place a "stop" order below the low of the handle to protect the trade.





Trading Cup and Handle Pattern

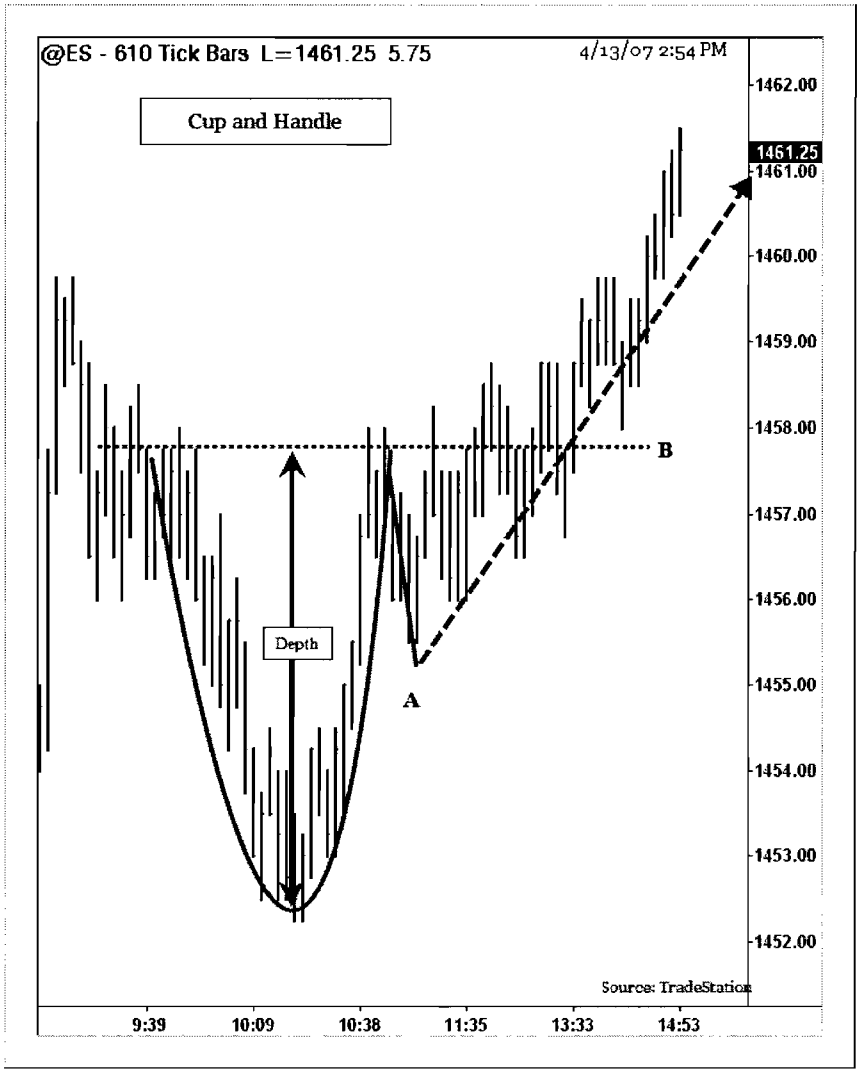


Trading Cup and Handle Pattern

The example above shows a "Cup and Handle" pattern formation from the Russell Emini (ER2) 30 minute chart. In January 2007, a "Cup and Handle" pattern has formed after ER2's uptrend. During the Cup formation (January 24 to January 29) the "Cup" pattern made highs at 798.6. A "Handle" part is formed from January 29 to January 30th between798 to 792. On January 31st, prices closed above the high of the "Cup" level at 799 to signal a "long" trade.

1. Enter a "long" trade above the top of the "Cup" level at 799.
2. Place a "stop" order below the "Handle" at 792.
3. Place a target at 62% to 100% of "cup" depth (12 to 18 points) from the breakout.

Trading Cup and Handle Pattern



Trading Cup and Handle Pattern

The example above illustrates a "Cup and Handle" pattern from the S&P Futures (ES) 610 tick chart. On April 13, 2007, during the morning session, ES formed a "Cup" formation between 1452 and 1453. Around 10.38 a.m., a correction in the trade resulted in a 38% "Handle" formation to the 1455.5 level. A breakout above the top of the "Cup" level signaled a "long" trade.

1. Enter a "long" trade above the high of the breakout bar at 1458.
2. Place a "stop" order below the low of the "handle" at 1455.
3. Target from 62% to 100% depth of the "cup" above the breakout level (1461 to 1464).

10.2. Head and Shoulders

Head and Shoulders Pattern

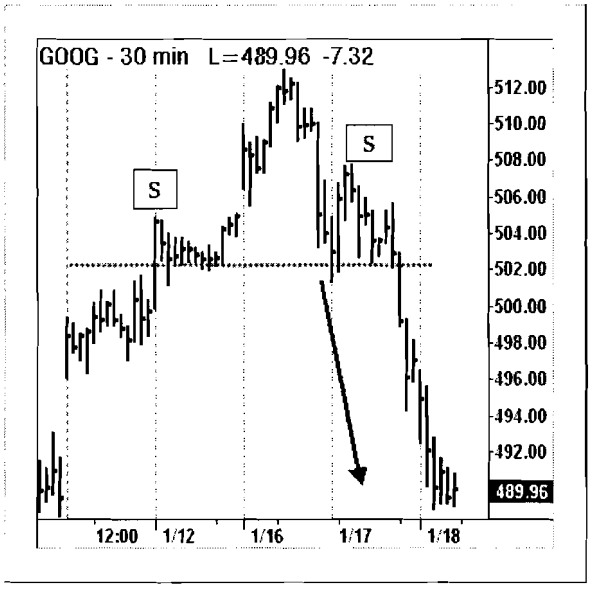
"Head and Shoulders" patterns are reversal formations that usually form at the market tops. "Head and Shoulders" patterns are very reliable, but failures do occur. When Head and Shoulders patterns fail, they reverse the pattern and trade in an explosive manner. Most "Head and Shoulders" patterns can be detected using volume patterns. During the left shoulder and the beginning of the "Head" formations, the volume will be heavy. While forming, volume dissipates on the right shoulder, and the volume increases during the breakdown.

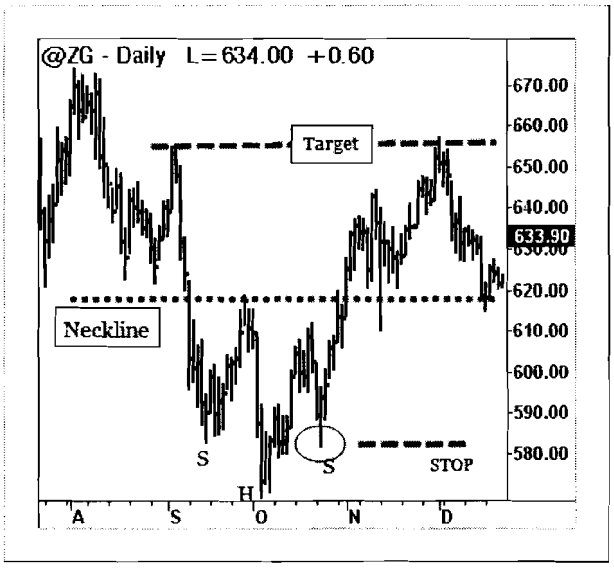
A trend line or neckline is drawn connecting the "Head and Shoulders" pattern to determine the potential trade opportunities and targets. The neckline can be also formed in an angle (slanted).

Trade:
Connect "Head and Shoulders" bottoms in a trend line or neckline. When the price closes below the neckline, a potential short trade is signaled. Short one tick below the breakdown bar's low.

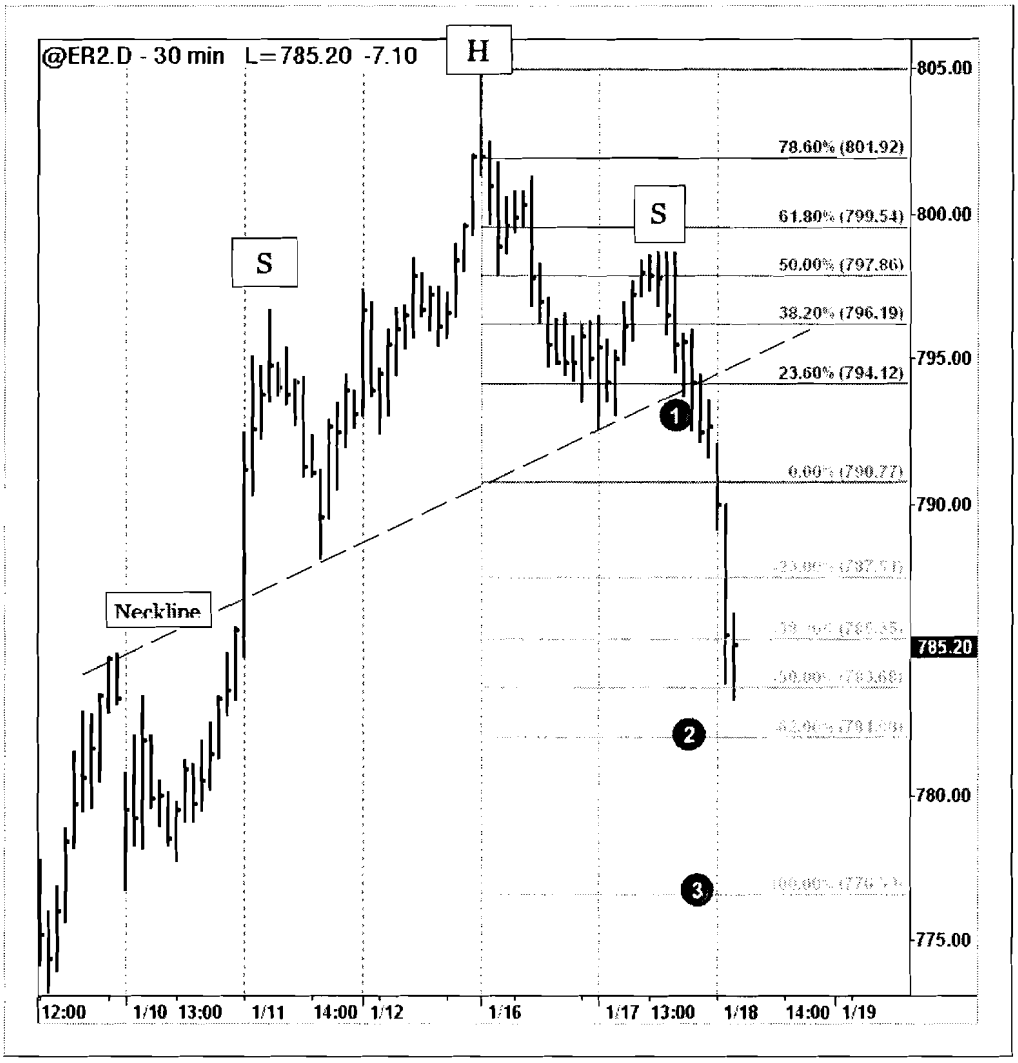
Target: Compute the vertical distance between the "apex" of the "Head and Shoulders" pattern and the neckline. The target is set below this distance from the neckline.

Stop:
After a trade entry, if the price closes above the neckline, a potential failure of the pattern is signaled. Place a "stop" order above the neckline.





Trading Head and Shoulders Pattern

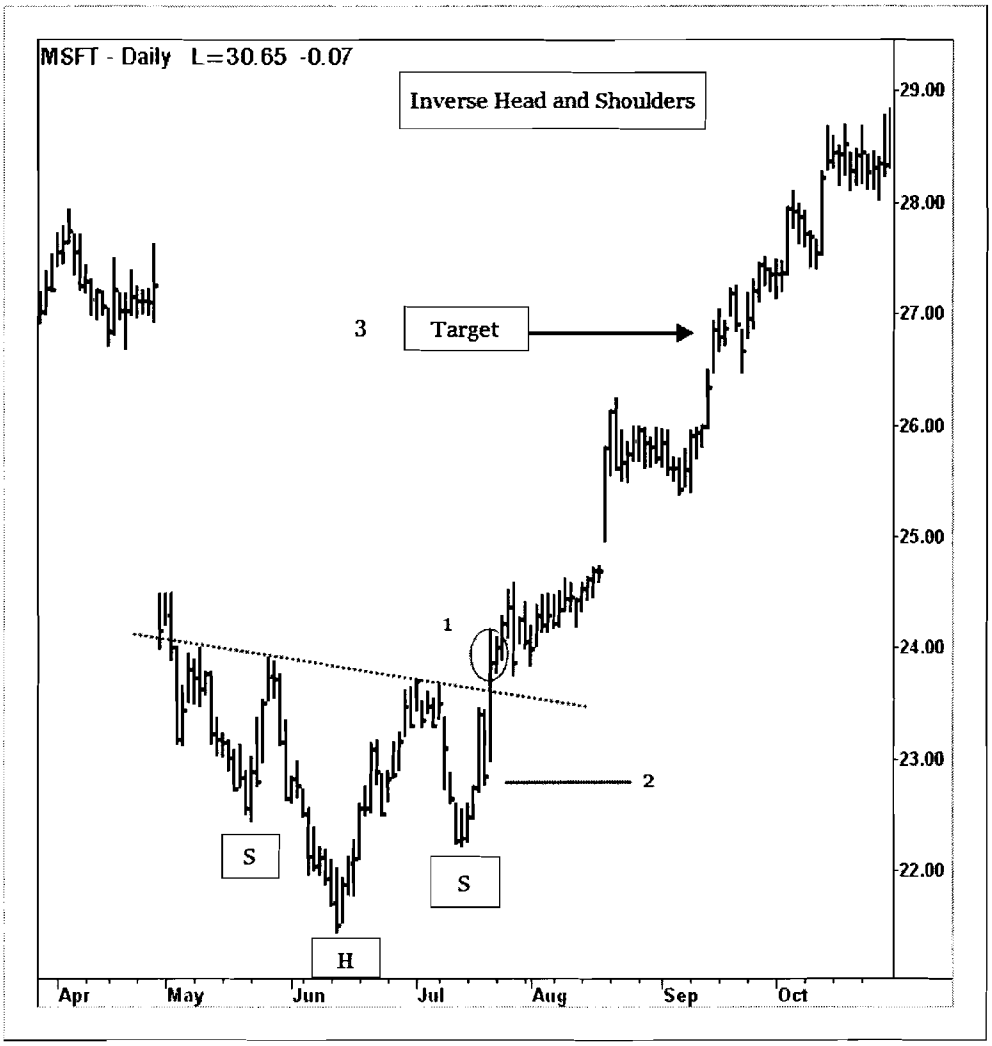


Trading Head and Shoulders Pattern

The example above shows a "Head and Shoulders" pattern formation from the Russell Emini (ER2) 30 minute charts. From January 11 to January 17, 2007, the pattern formed "Head and Shoulders" pattern. A neckline was drawn connecting the bottom of the two "shoulders" to signify the potential breakdown trade. On January 18, ER2 closed below the neckline to confirm a breakdown.

1. Enter a "short" trade below the low of the breakdown bar at 794.
2. Target 62% to 100% of the pattern depth (14 points) from the breakdown level at 794.
3. Place a "stop" order above the neckline at 796.

Trading Inverse Head and Shoulders

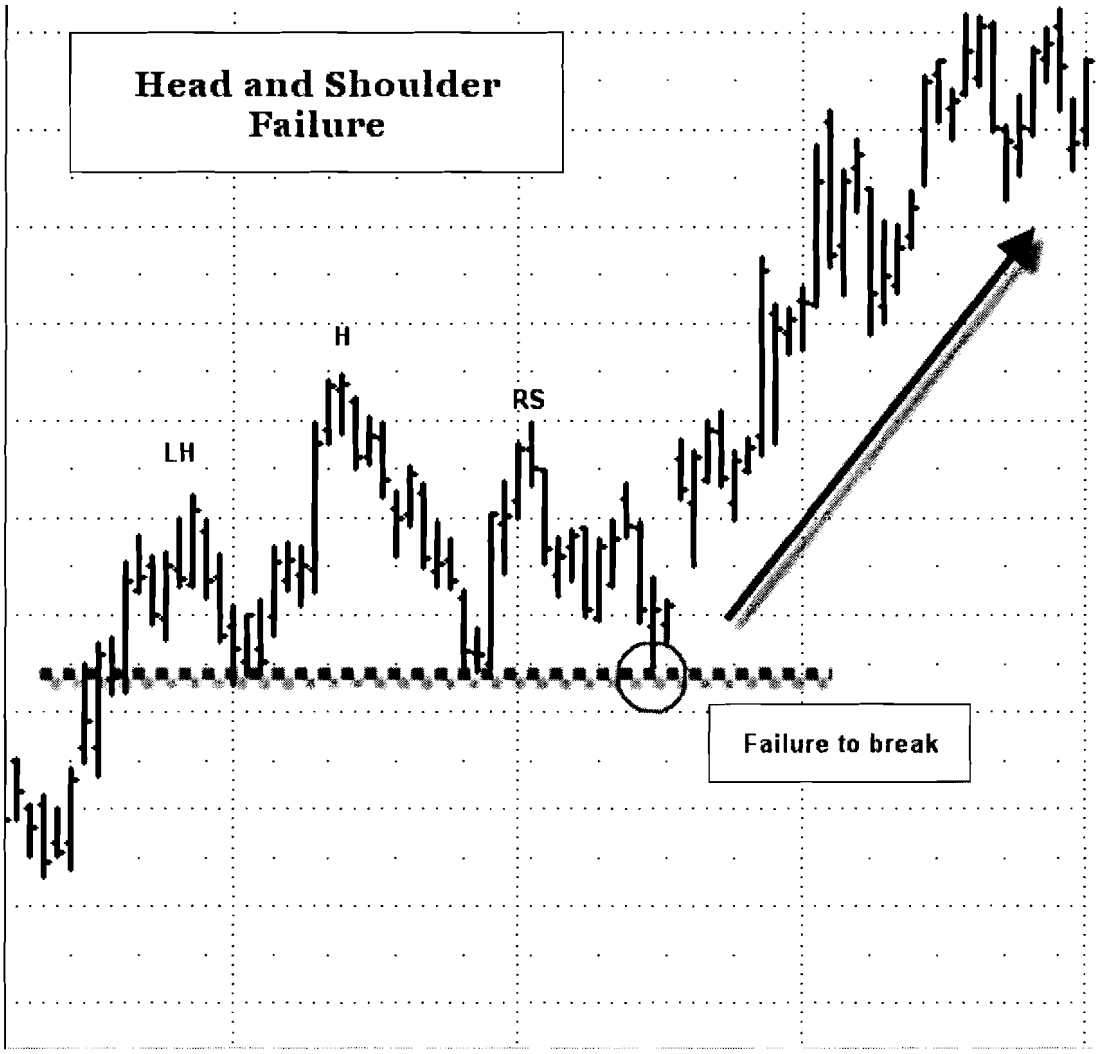


Trading Inverse Head and Shoulders Pattern

The example above illustrates the "Inverse Head and Shoulders" pattern formation from Microsoft Corporation's daily chart. In anticipation of Microsoft's Vista Operating System, investors drove the stock upside from August to December 2006. A neckline is drawn connecting the "Head and Shoulders" swing highs. In late July, Microsoft traded above the neckline and signaled a potential long trade.

1. Enter a "long" trade above high of the breakout bar at $24.
2. Place a "stop" below the right shoulder at $22.
3. Target the depth of the "Head and Shoulders" pattern ($3) from $24 to $27.

Trading Head and Shoulders Failure

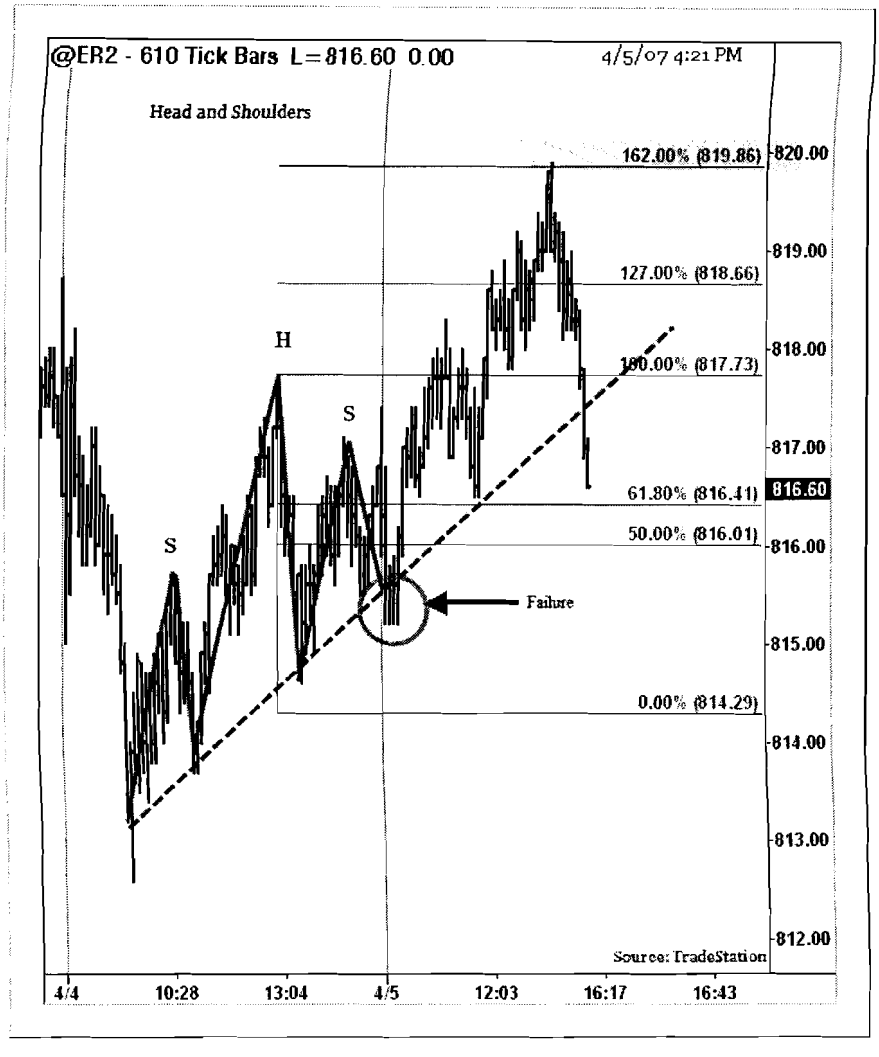


Trading Head and Shoulders Failures Pattern

The chart above illustrates an example of a "Head and Shoulders" pattern failure. A trend line is drawn connecting the bottoms of the "Head and Shoulders." The "Head and Shoulders" failures occur when prices failed to close below the trend line.

1. Enter a "long" trade above the "high" of the right side shoulder.
2. Place a "stop" order below the neckline for trade protection.
3. Target the depth range from head to the neckline from the trade entry.

Trading Head and Shoulders Failure



Trading Head and Shoulders Failures Pattern

The example above illustrates a "Head and Shoulders" pattern failure from the Russell 2000 Emini chart. On April 4 2007, ER2 formed a "Head and Shoulders" pattern with inclined (slanted) neckline. On April 5 2007, a trend line breakdown is anticipated for a "Head and Shoulders" pattern. This pattern is an example of reversal formation as "Head and Shoulders" pattern failed and continued in a reverse direction from the previous trend.

1. Enter a "long" trade above the high of the right side shoulder.
2. Place a "stop" below the low of the prior swing before the trade.
3. Target 100% of the depth of the "Head and Shoulders" pattern from the trade entry.

10.3. Parabolic Arc

Parabolic Arc Pattern

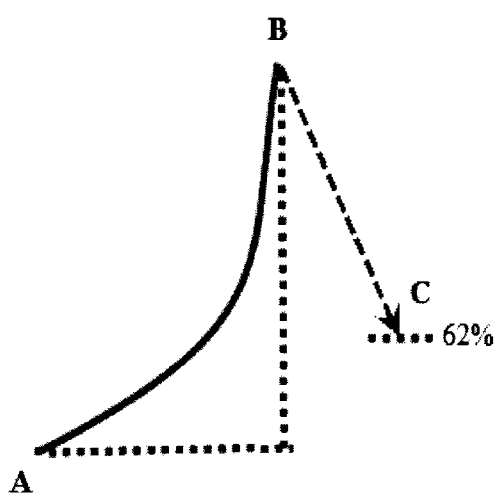
"Parabolic Arc" patterns are very rare, but occur in mega-bull trends. These patterns form in bull markets where irrational buying in the public generates a strong rally as the prices rise almost vertically, e.g., the Internet Boom in 2000 and the Metals boom in 2005-2006. Most of these "Parabolic Arc" patterns go straight up and then come straight down. Other examples of this market types are the NASDAQ bullish markets during 1999-2000 and Gold prices from 1977 to 1982.

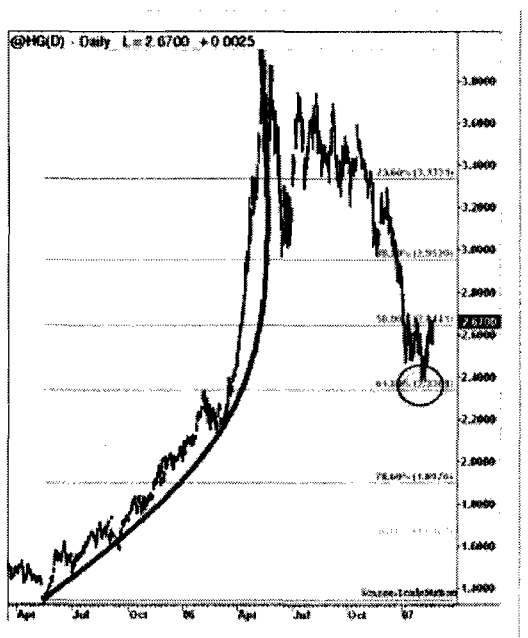
"Parabolic arc" is a reversal pattern and has a very predictable outcome. Although they are predictable, they are relatively difficult to trade since the market sentiment is bullish and may be relatively tough to point reversals to trade. Most "Parabolic arc" patterns have a significant correction of 62% from the top.

Trade: After a parabolic base, prices move up vertically and eventually the acceleration comes to a stop and then reverses. Prices start showing lower-lows and may attempt to regain the top again. Enter a "short" trade at the second failed attempt to test the peak or at the trend line breakdown connecting the major swing lows.

Target:
Measure the distance of the rise from the base to the top. Most "Parabolic Arcs" result in 62% retracement.

Stop: Protect the trade by placing few ticks above the high point of the Parabolic Arc.





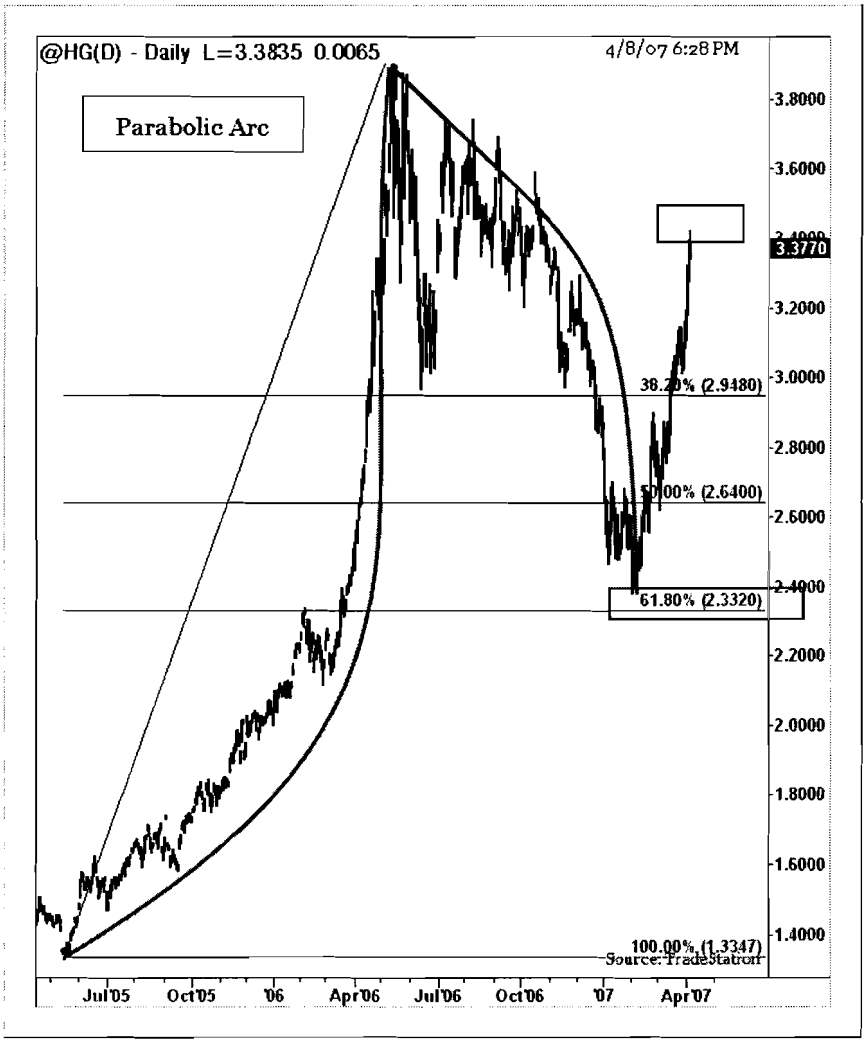
Trading Parabolic Arc

Trading Parabolic Arc

The example above illustrates a "Parabolic Arc" formation from the Silver futures chart. In 2005, Silver gained momentum as the metals sparked an interest in the world-wide markets. Silver futures rallied from the mid 7 to 15 range in a 12 month period. Prices rallied vertically during the beginning of 2006 setting up for a correction. From April 2006 to July 2006, silver futures corrected 62% to trade near 10.

1. Silver prices made a failed attempt to test previous "Swing High" (similar to 2B Sell setup).
2. Enter a "short" trade below first peaks' low at 14.50.
3. Place a "target" at 62% of the entire range to the first peak to 10.
4. Place a "stop" order above the close of the second peak at 15.5.

Trading Parabolic Arc



Trading Parabolic Arc Pattern

"Parabolic arc" trading is rare, but does occur in both extreme bull and bear markets. The chart above illustrates an example from the Copper futures daily chart. From the bottom of 1.4000, in July 2005 to April 2006, copper futures rallied to 3.8000. Copper futures retraced to 62% by January 2007 in a corrective "Parabolic arc" form to close near 2.4000. The "Parabolic Arc" resulted in another corrective phase (to the upside) to bounce back to 62% level near 3.3800. Trading the parabolic curve is not an easy proposition, but long term trades may be profitable. Parabolic arcs also form in intra-day trading, displaying much more violent moves and may be difficult to trade.

10.4. Three Hills and A Mountain Pattern

Three Hills and A Mountain

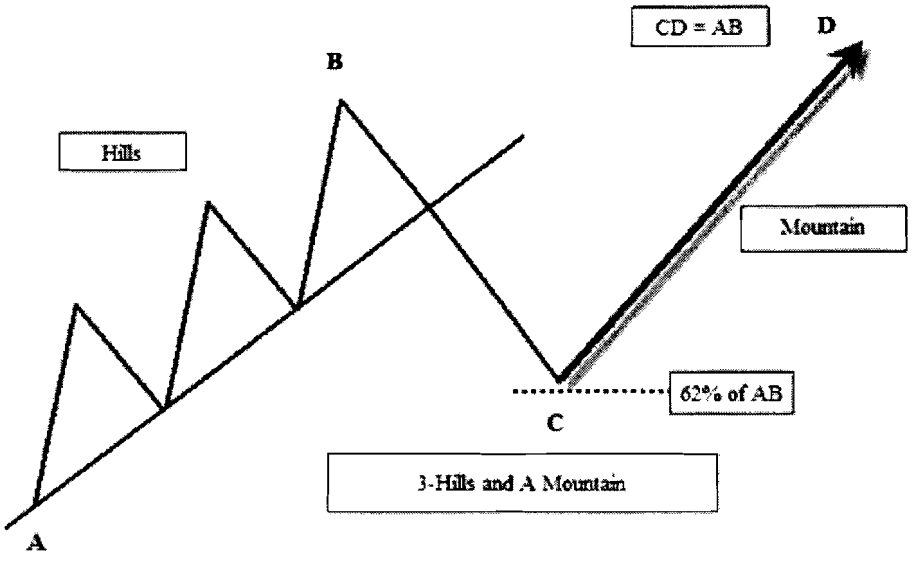
The "Three Hills and A Mountain" is rare, but a very reliable pattern. This pattern is similar to the "3-Drives (Bearish)" pattern. However, the "Three Hills" pattern is not of equal magnitude hills, and consists of another reversal trade in the original trend direction. The pattern also has a close relation to Elliott wave theory. The pattern supports Fibonacci retracement and extension concepts for key support and resistance areas. This pattern has two trade setups; one "short" and one "long."

Each hill retraces to a minimum of 0.5 to 0.618 (Fibonacci ratio) of its height before expanding into the next hill. After completion of the "Three Hills," a trend line is drawn in the chart below connecting the bottoms of the "Three Hills." A close below the trend line gives a short-trading opportunity. After completion of 62% of the prior range, it has another important reversal to the upside, the "Mountain" which rallies about 100% to 127% of entire hills range (AB).

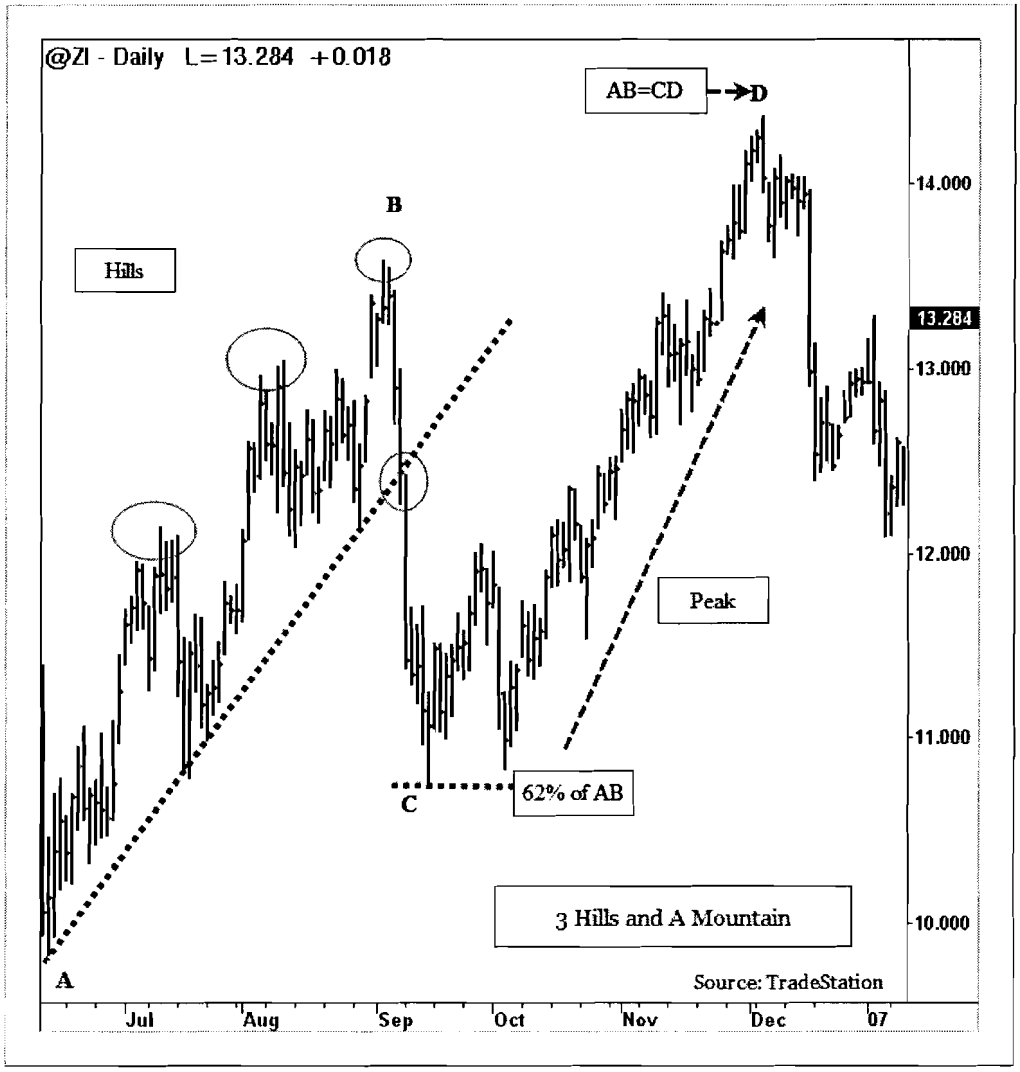
Trade: The first trade occurs on the close below the trend line. The second trade occurs after completion of a 62% retracement to the downside-"AB." The second trade is a "long" trade from "C."

Target: The first trade target (Short) is 62% of prior swing length-"AB." The second trade target is from the "C" level, which is 100% to 127% of "AB" to the upside.

Stop: Place the "first trade" stop above the "B" level and the "second trade" stop below the "C" level.



Trading Three Hills and A Mountain

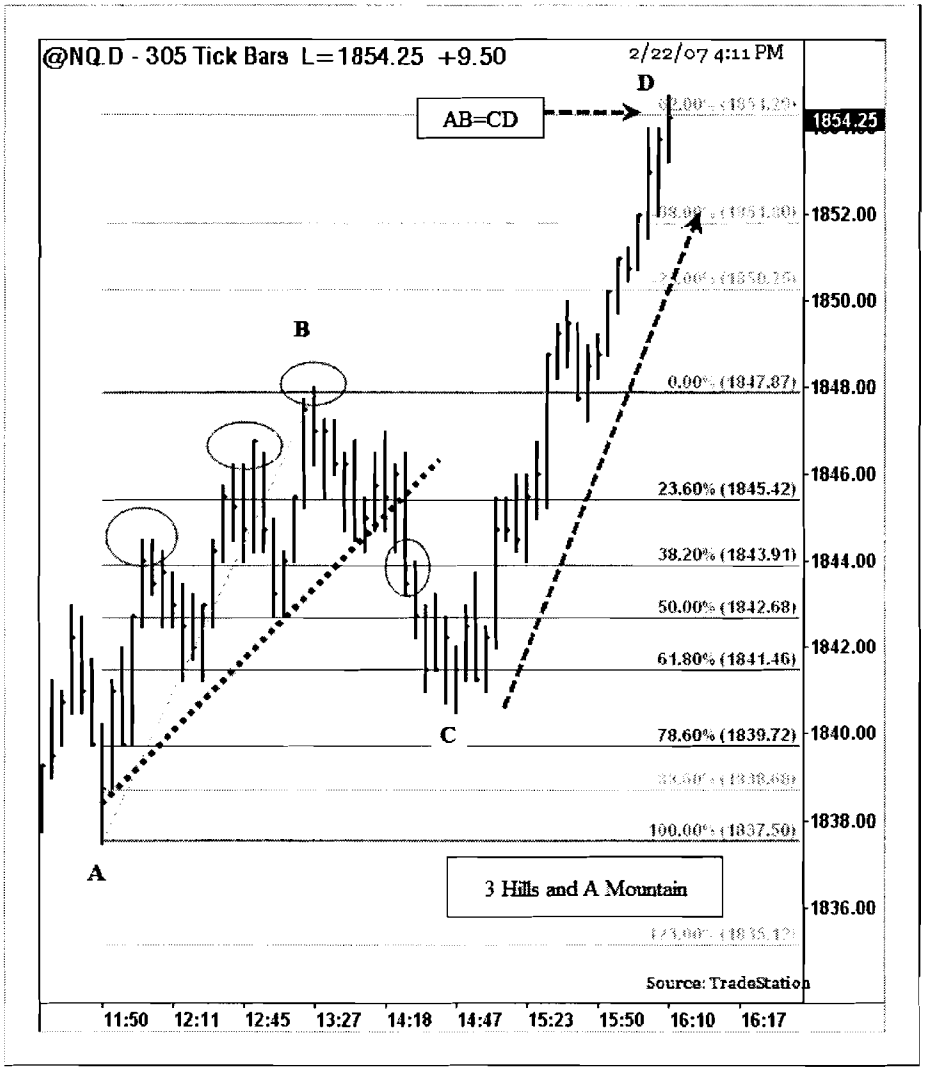


Trading Three Hills and A Mountain Pattern

The example above shows the "Three Hills and a Mountain" pattern from the daily Silver futures chart (ZI). From July 2006 to September 2006, Silver futures traded from 10.800 to 13.300 in a "Three Hills and A Mountain" pattern. A trend line was drawn in the chart above connecting the bottom of the "Three Hills." In September 2006, Silver futures closed below the trend line at 12.000, signaling a potential short-trade. The short trade target is set for 62% of "AB" at 10.975.

1. After reaching level "C"at 62%, a "long" trade is triggered above the previous bar's high at 11.500.
2. The target is set at AB=CD range at 14.400.
3. Place a "stop" order below level "C" at 10.970.

Trading Three Hills and A Mountain



Trading Three Hills and a Mountain Pattern

The chart above illustrates a "Three Hills and A Mountain" pattern from the NASDAQ futures (NQ) 305 tick chart. On February 22, 2007, around noon, the pattern started to emerge as NQ made "Three Hills" and with Fibonacci proportionate retracements. A trend line is drawn connecting the three hills for a potential breakdown. At around 2.15 pm, NQ futures closed below the trend line and retraced to 62% of AB at level "C."

1. After confirming level "C" at 62% of AB, a "long" trade is entered above previous bars' high at 1844.
2. The target is set at "AB" length from level "C" at 1854.
3. A "stop" order is placed below level "C" at 1840.

10.5. Three Valleys and A River Pattern

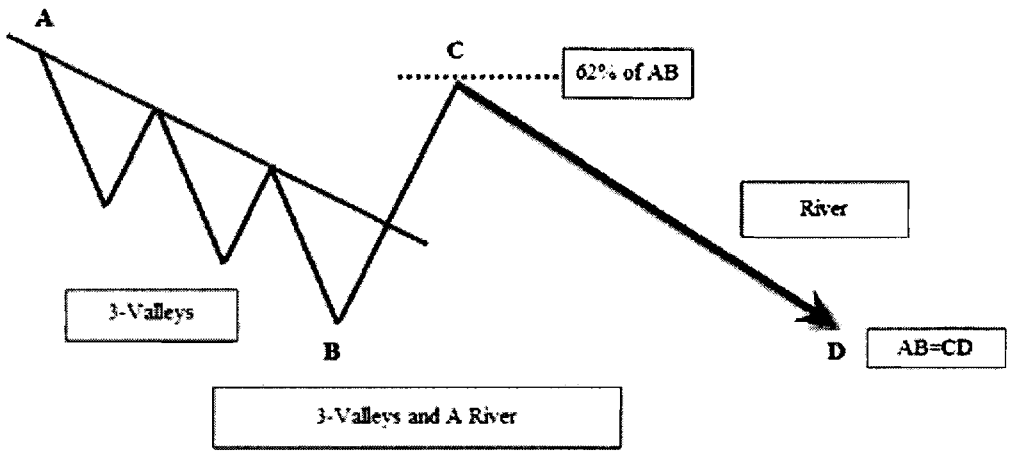
Three Valleys and A River

The "Three Valleys and A River" pattern is similar to the "Three Hills and A Mountain" pattern but in a reverse sense, and it is also similar to the "3-Drives (bullish)" pattern. The "Three Valleys and a River" pattern is very rare, but it is also very reliable pattern. It does have 3 distinct valleys as prices making three thrusts to go up and succeed in the third attempt. Usually this pattern occurs near the market bottoms. The "Three Valleys and a River" pattern further supports Fibonacci ratios among the three drives. Each valley retraces to a minimum 0.5 to 0.618 Fibonacci ratio of its height before expanding into the next valley. After completion of three valleys, a trend line is drawn connecting the top of the three valleys. Prices closing above the trend line signal a "long" trade. After completion of 62% of the previous range, it has another significant reversal to the downside (River).

Trade: The "Three Valleys and a River" pattern presents two trade setups. First trade: A close above the trend line signals a reversal. Enter a "long" trade one-tick above the high of the breakout bar. Second Trade: After completion of 62% of the AB range, enter a "short" trade at point "C."

Target: Target setups for the above two trades. The first trade setup is "long" from the three valleys. For this trade setup, set a target at 62% to 78% of the AB range. The second trade results in 100% of the AB range retracement from point "C."

Stop: For the first trade, if prices close below the trend line, close the trade. For the second trade, if prices close above level "C", close the trade.



Trading Three Valleys and A River

Trading Three Valleys and A River Pattern

The example above shows a "Three Valleys and a River" pattern from the ZLC weekly chart. ZLC established a 3-Valley pattern from July, 2005 to April, 2006. A trend line is drawn the connecting the tops of three valleys. In June 2006, ZLC closed above the trend line to confirm a "long" trade.

1. Enter a "long" trade above the high of the breakout bar from the trendline.
2. Place a "stop" order few ticks below the trend line.
3. Target 62% of the range between the top of the first valley to the bottom of the third valley.

Trading Three Valleys and A River

Trading Three Valleys and A River Pattern

The chart above illustrates an example of "Three Valleys and A River" pattern from Tyco's (TYC) weekly chart. From April 2005 to October 2006, TYC formed three "valleys" and attempted to rise three times beyond $30. A trend line is drawn in the chart above connecting the three valley tops for a trade setup. In October 2006, Tyco closed above the trend line to signal a potential long setup.

1. Enter a "long" trade above the high of the breakout bar at $27.
2. Place a "stop" order below the trend line to protect the trade at $25.5.
3. Place a "target" at the 62% range of the all three valleys.

10.6. Spike and Ledge Pattern

Spike and Ledge Pattern

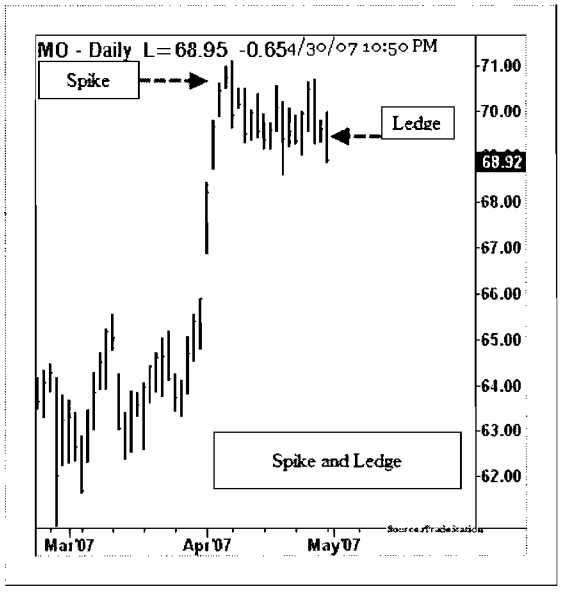
The "Spike and Ledge" pattern was first defined by Larry Connors and Linda Raschke in the book, *Street Smarts*. As the name suggests, markets make a "climax high" or "climax low" (New High or New Low) spikes followed by a resting point or "ledge" then a reversal of the prior trend.

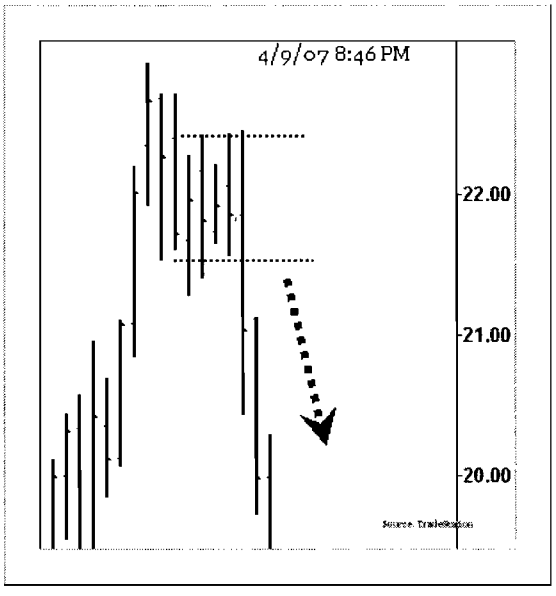
A "Ledge" pattern is defined as a series of bars with matching lows and highs within a certain number of bars, namely 20. Usually "ledge" patterns are considered as a resting point before markets pick a clear direction, which is mostly a reversal of the current major trend. Ledge patterns are effective in all time-frames but they are more effective during intra-day trading.

Trade: Set a trade entry at the "breakout" or "breakdown" from the "Ledge" formation. Wait for a clear breakdown or breakout and enter at the low (or high) of this bar.

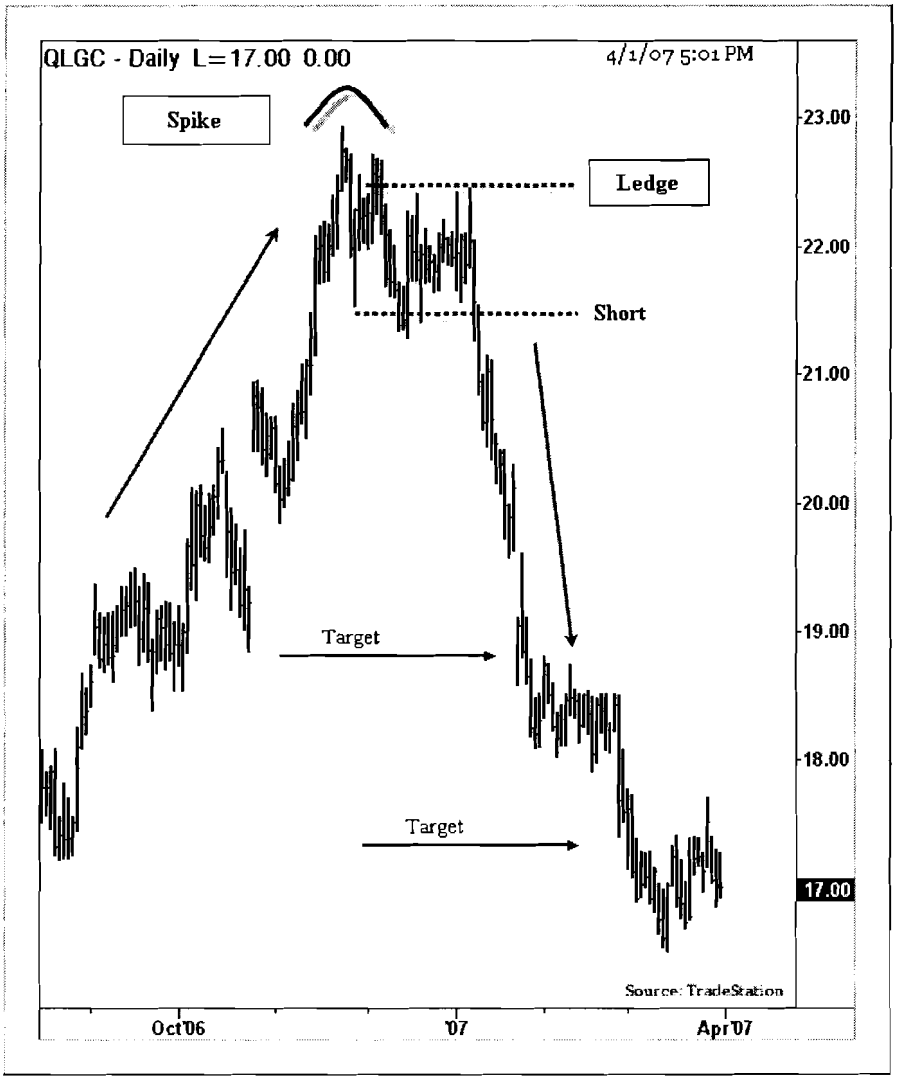
Stop: Place a "stop" order on the opposite side of the "Ledge" pattern. For long trades, place a "stop" order below the low of the "Ledge" pattern. For "short" trades, place a "stop" order above the high of the "Ledge" pattern.

Target:
Usual targets would be the prior "major swing high" for long trades or prior "major swing low" for short trades from the "breakdown" or "breakout" levels. If markets experience a "gap" prior to the "Spike" formation, targets after a breakdown/breakout from the "Ledge" pattern would be the "gap" levels. Otherwise, the target would be a prior "swing low" or prior "swing high" before the "Spike" formation.





Trading Spike and Ledge Pattern

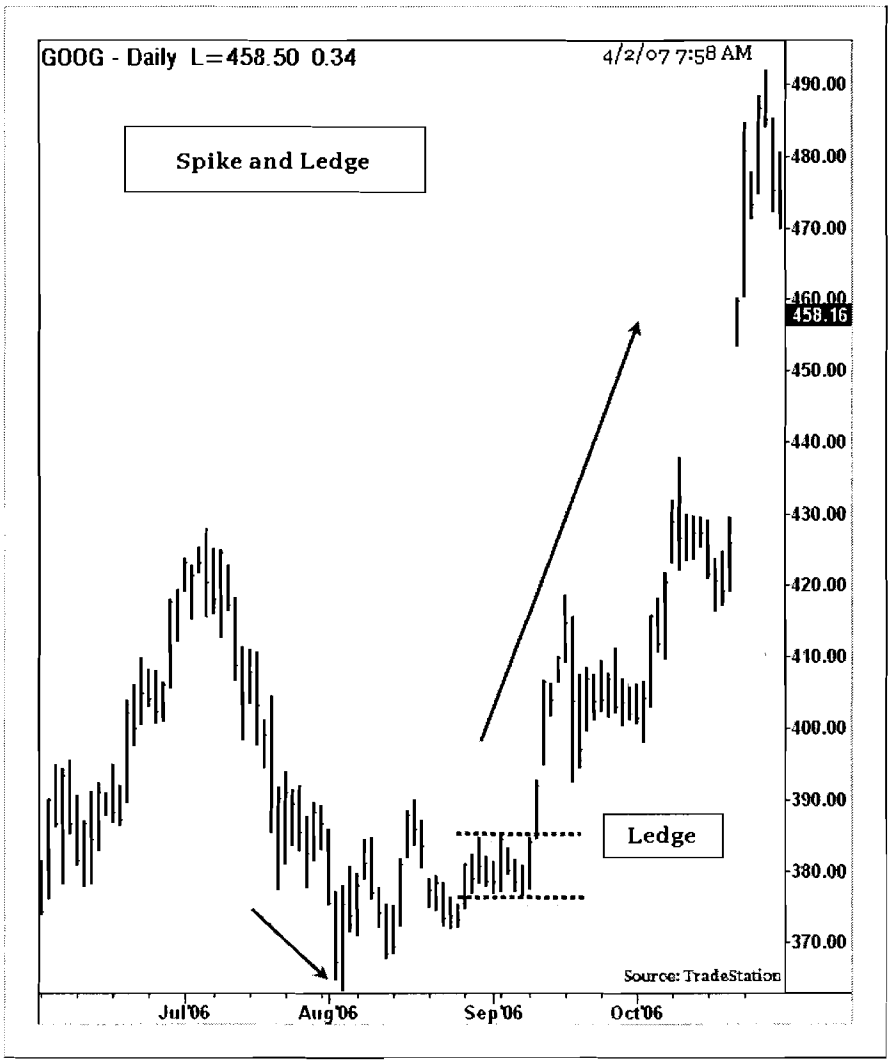


Trading Spike and Ledge Pattern

The example above illustrates a "Spike and Ledge" pattern from the QLogic (QLGC) daily chart. QLogic made a new "high" in November, 2006 and closed near $23. The last few days in November, 2006 were of high volume trading. After making a new high, QLogic attempted to sell-off and formed a "Ledge" pattern with matching highs and lows. In January 2007, QLogic broke out of the "Ledge" pattern and presented a "short" trading opportunity.

1. Enter a "short" trade below the low of the breakdown bar at $21.50
2. Place a "stop" order above the high of the "ledge" pattern at $22.50
3. Target the major "swing low" prior to the "spike" at $19.

Trading Spike and Ledge Pattern



Trading Spike and Ledge Pattern

The chart above demonstrates a "Spike and Ledge" pattern from the Google daily chart (GOOG). After a sell-off in July 2006, GOOG made a climax sell-off to close below 365 with high volume. In September 2006, GOOG attempted to rally back and made a "Ledge" formation with a series of matching highs and matching lows. A breakout above the "Ledge" formation signals a "long" trade to the upside.

1. Enter a "long" trade above the high of the breakout bar.
2. Place a "stop" loss below the "low" of the "Ledge" pattern.
3. Place a "target" at "swing high" prior to the down "Spike."

Chapter 11: Tops and Bottoms

11.1. Adam-Eve Patterns

Adam-Eve Patterns

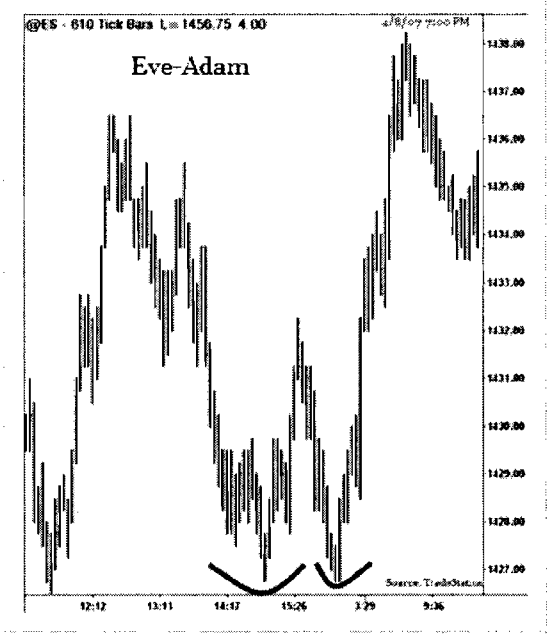
"Adam and Eve" patterns are variations of "double tops" and "double bottoms" patterns. They have little more complex trading rules than regular "double bottom" and "double top" patterns, but consist of pattern trading rules similar to *Triangles, Pennants* and *Wedges* trading structures. Adam-Eve patterns are very reliable as they form at the market tops and at the market bottoms. Trading these patterns is relatively easy with low-risk trading rules.

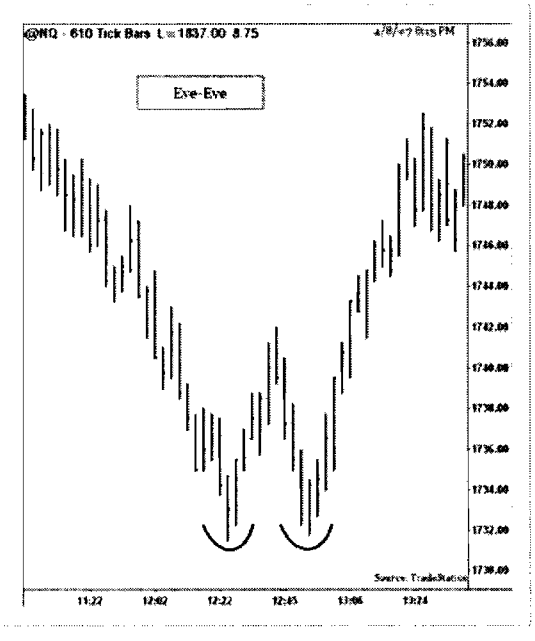
Inside the "Adam-Eve" patterns, the "Adam" part looks like a sharp spike or "V" bottom; where as, "Eve" patterns have a round bottom (or top). Although rare, sequences of "Adam-Eve-Adam" or "Eve-Adam-Eve" patterns do occur, and they may be more reliable than "Adam-Eve" or "Eve-Adam" pairs. These patterns tend to signal much bigger moves. A sequence of "Adam-Adam" or "Eve-Eve"' is also very common.

Trade: Although these patterns are visually easy to detect, a confirmation is needed for successful trading. Many times "double bottoms" and "double tops" may continue to form "multiple tops" and "multiple bottoms." Trades are entered in the direction of the breakout/breakdown of the middle spike between "Adam and Eve" structures.

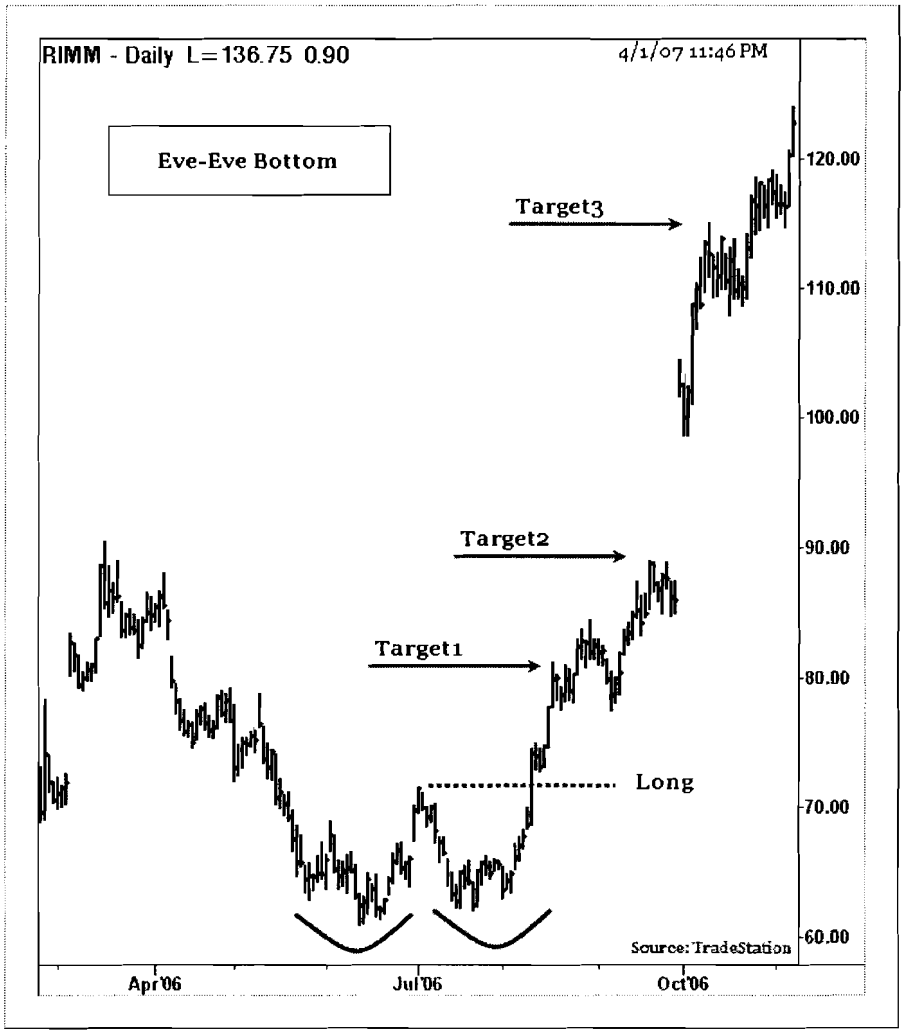
Target: "Adam and Eve" pattern formations are very profitable. The targets can be set at the previous swing high/swing low of the first swing in the "double top" or "double bottom." Subsequent targets would be set at the next "higher swing high" or the next "lower swing low."

Stop: "Adam and Eve" patterns also fail. Protect trades using the pattern high for "short" trades and pattern low for "long" trades.





Trading Adam-Eve Pattern

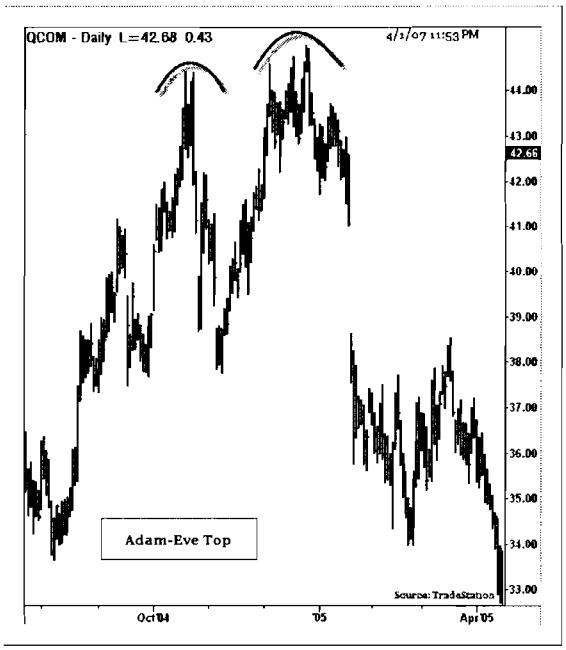


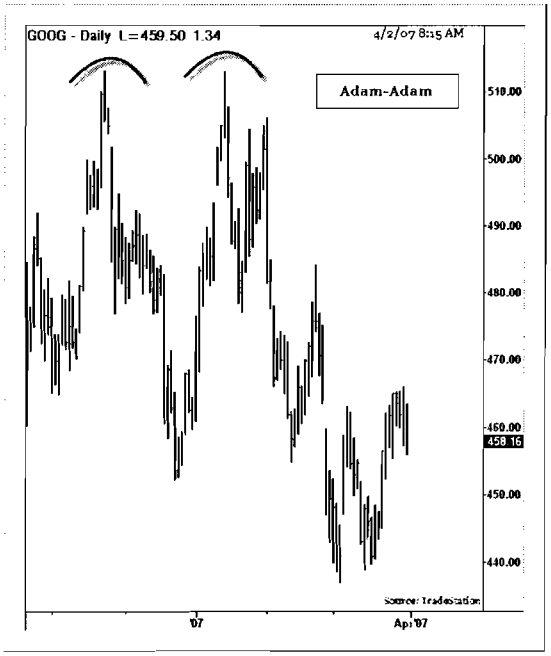
Trading Adam-Eve Pattern

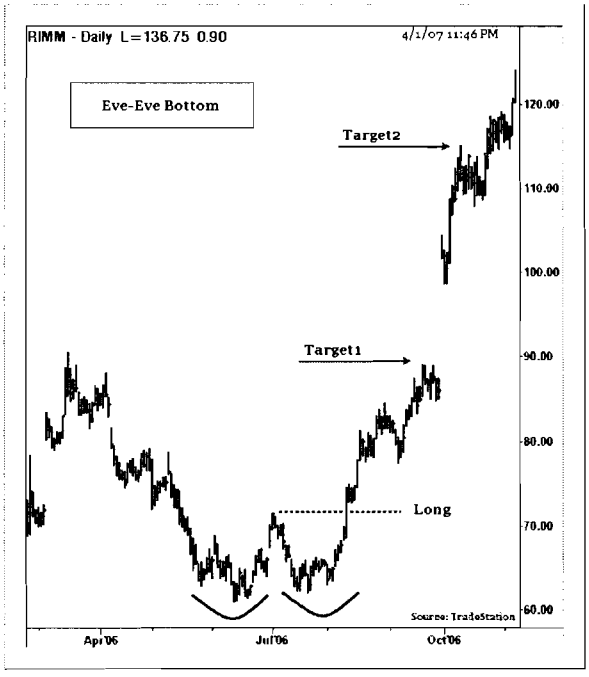
The above example shows a "Double Bottom" (Eve-Eve) pattern formation from the Research in Motion (RIMM) daily stock. RIMM formed a double bottom in May 2006 to August 2006. The middle spike was at $70. A "long" trade is triggered above the high of the breakout bar at middle spike.

1. Enter a "long" trade above $71.
2. Place a "stop" order below the low of the "Double Bottom" at $60.
3. Target the first "major swing high" prior to the pattern formation at $80. Secondary targets are set at the next "major swing high" or "major swing low" prior to the pattern.

Adam-Eve Patterns







11.2. Trader Vic's 2B Pattern

Trader Vic's 2B Patterns

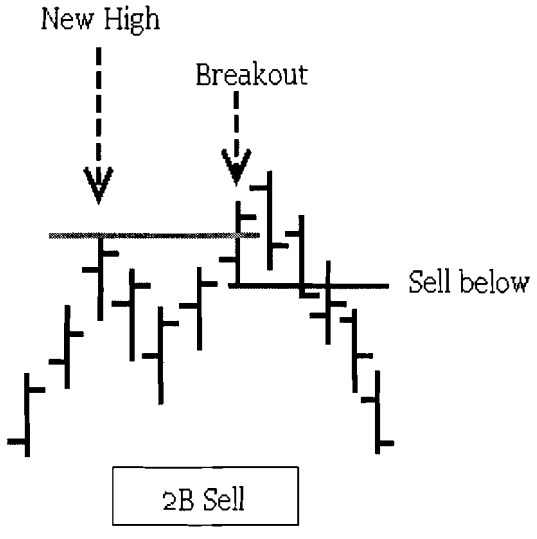
"*Principles of Professional Speculation*" written by Victor Sperandeo (Trader Vic), analyzes one of the powerful top/bottom reversal techniques. Trader Vic describes this technique, "In an uptrend, if prices penetrate the previous high, but fail to carry through and immediately drop below the previous high, the trend is apt to reverse." The converse is true for a down trend. This pattern is also called "spring." The 2B setup looks like a micro "M" pattern and signals trend reversal when prices stop making higher-highs in an uptrend.

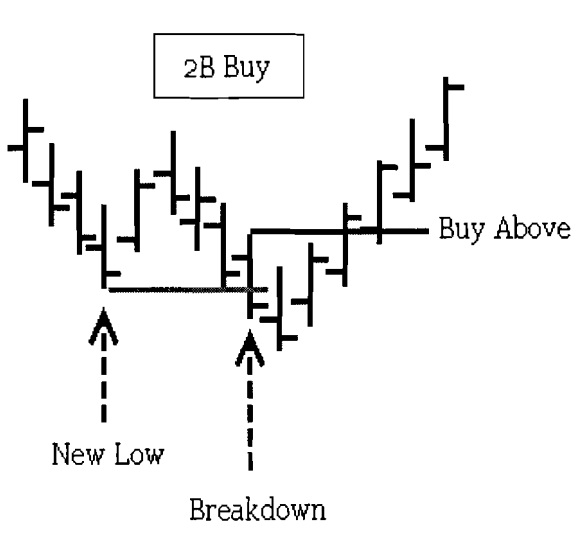
The 2B pattern rule is when prices make a new high or new low; they pull back for a healthy retracement. After retracement, the price tries to re-test the new high or new low. When this test of new high or new low fails, and it does not maintain the prices above the new high or low, it signals a potential trend reversal. This setup is very powerful and signals the beginning of a correction.

Trade: The market attempts to test a recent new high or low, but does not hold the prices above this range. Trades are entered to sell the low of the bar trying to breakout or buy the high of the bar trying to breakdown.

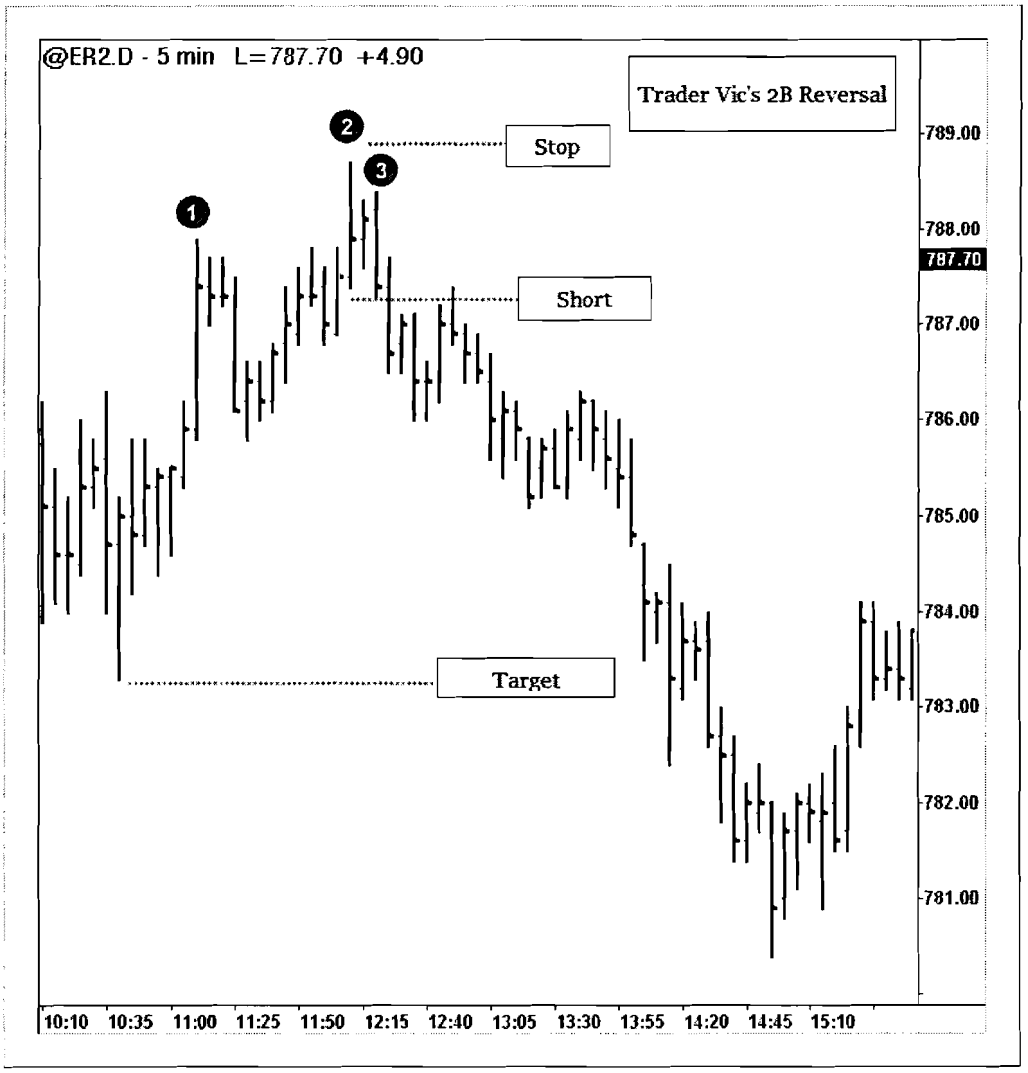
Target: The target is usually the "swing low" prior to the new high for 2B Buy setup or "swing high" prior to the new low for 2B Sell setup.

Stop: Protect your "long" trade entry by placing a "stop" below the recent low and protect the "short" trade entry by placing a "stop" above the recent high.





Trading 2B Bearish Pattern

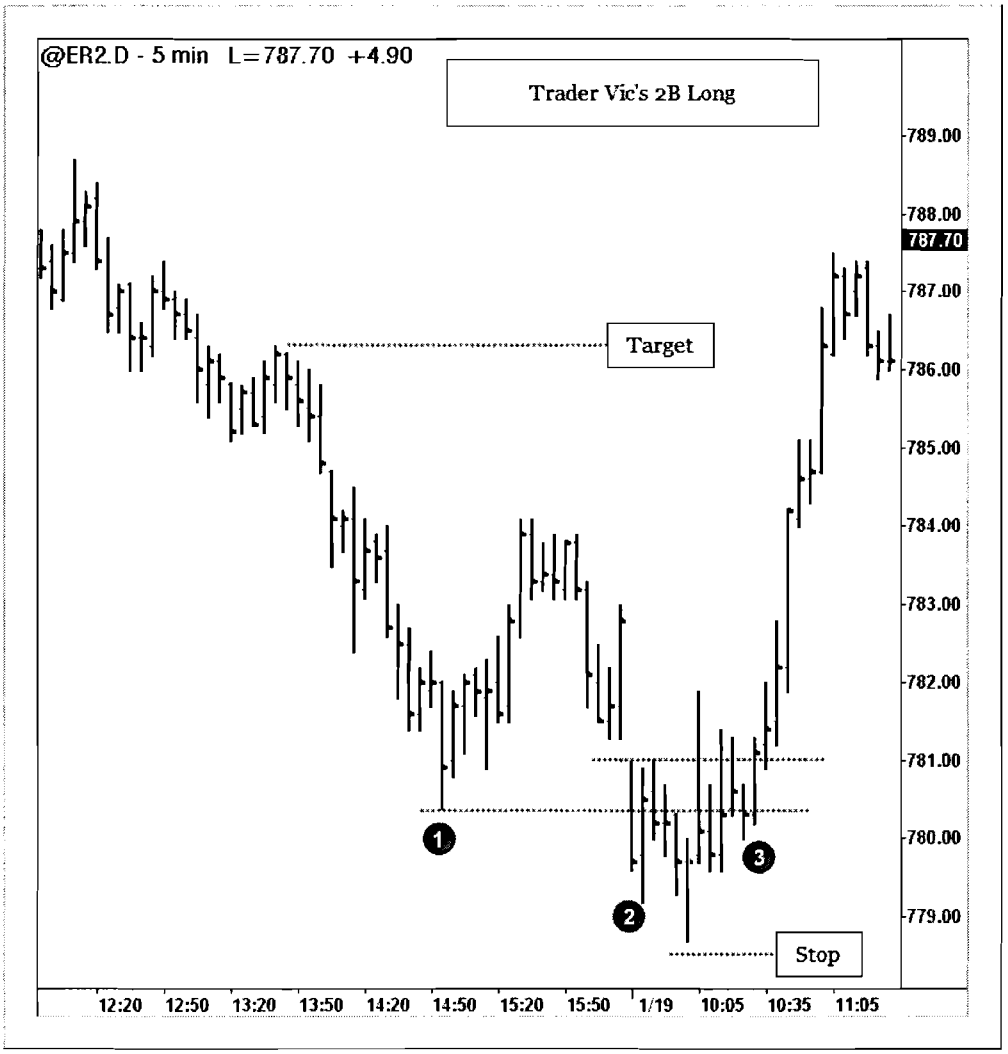


Trading 2B Bearish Pattern

The example above shows Trader Vic's 2B bearish reversal pattern from the Russell Emini (ER2) 5 minute chart. ER2 made a new high at 788. Prices retraced a few bars but traded above the bar 1's low. After pullback, ER2 rallied back to test the new-high at Bar 2. Within few bars, ER2 closed below the breakout Bar 2's low. This signaled a short trade at 787.7.

1. Enter a "short" trade below the low of the Bar 2 at 787.7.
2. Place a "stop" order above the high of the breakout Bar 2 at 789.
3. Place a target at the "swing low" prior to Bar (1) at 783.5.

Trading 2B Bullish Pattern

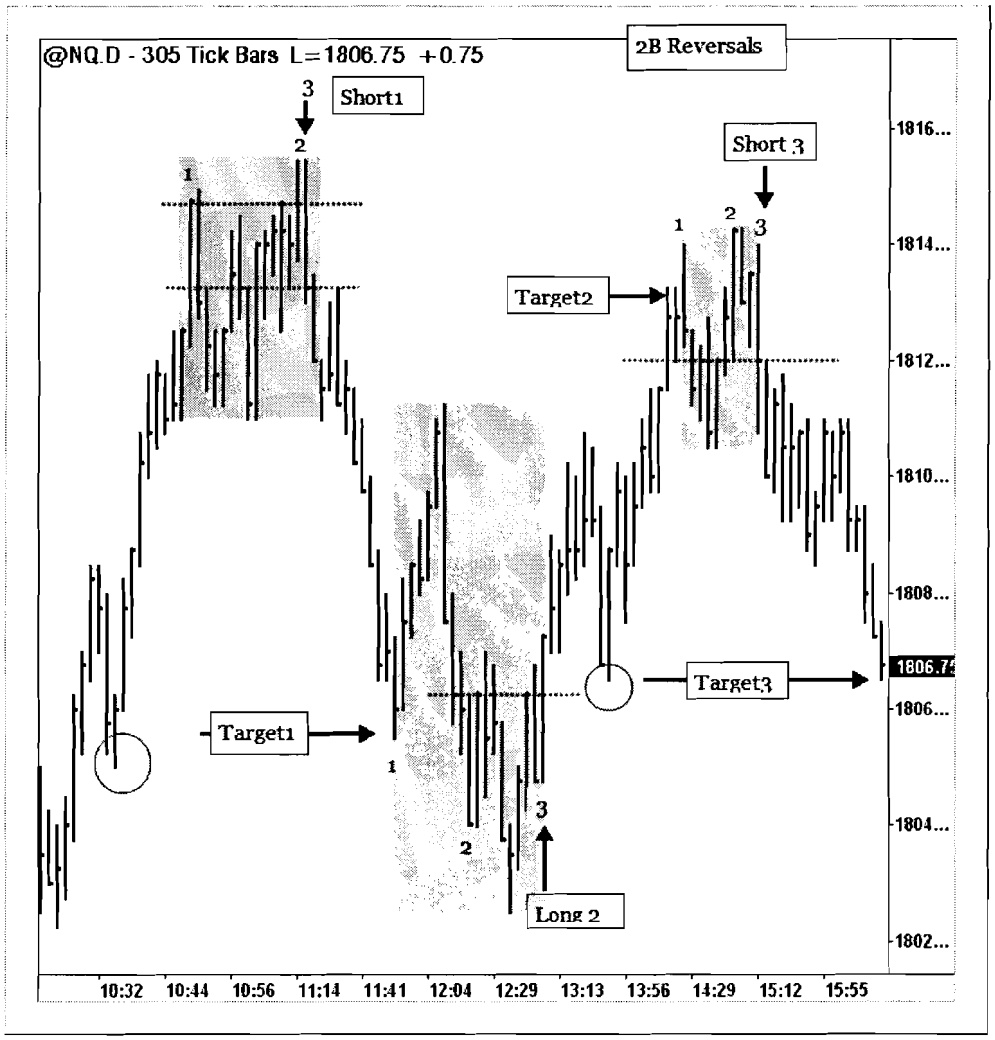


Trading 2B Bullish Pattern

The example above illustrates a 2B "bullish" reversal pattern from the ER2 5 minute chart. ER2 made a new low at 780.5 (at Bar 1). After a new low, ER2 reversed its trend and rallied back to 784 for a healthy pullback. ER2 attempted to test the new low again at 780.5 at Bar 2 to close below the low of Bar (1). As the market continued to consolidate around the breakdown levels, a long trade is anticipated. A reversal and close above Bar 2's "high" triggered a 2B "reversal." At Bar 3, ER2 reversed and closed above Bar 2's "high" signaling a "long" trade.

1. Enter a "long" trade above the high of Bar 3.
2. Place a "stop" order below the recent low at 778.5.
3. Place a target at the "swing high" before Bar 1 at 786.5.

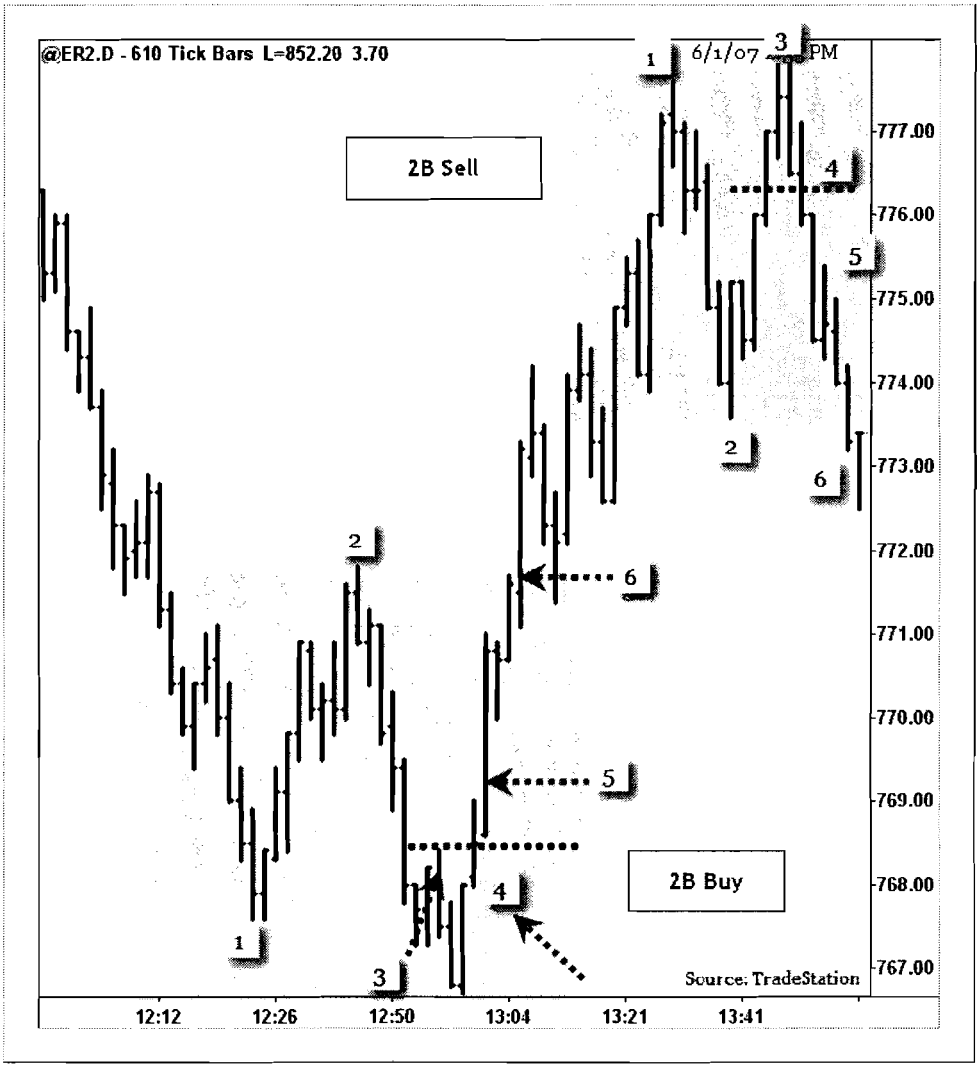
Trading 2B Patterns



Trading 2B Reversals

The example above shows a series of 2B "bullish" and 2B "bearish" reversals. The first example explains a 2B "sell" reversal setup for a "short" trade below the close of bar (3). The target is set at "swing low prior to bar (1). The "stop" order is set at bar (2)'s high. The second setup shows a 2B "bullish" reversal. A "long" trade is triggered above the high of bar (2). The target is placed at the "swing high" prior to bar (1). A "stop" order was placed below "swing low" prior to bar (3). The third setup is a 2B "short setup" similar to 2B "short setup" at Shor trade 1.

Trading 2B Patterns



2B Buy Setup

1. New Low
2. Decent Retracement
3. Another bar close below Bar 1 Low
4. Mark High of Bar 3. Wait for Close above 4.
5. Long above the High of 4
6. Target previous Swing Highs

2B Sell Setup

1. New High
2. Pullback
3. Another bar Close above Bar 1High
4. Mark Low of Bar 3. Wait for Close below 4
5. Short below the Low of 4
6. Target Previous Swing Lows

11.3. Trader Vic's 1-2-3 Patterns

Trader Vic's 1-2-3 Patterns

"*Principles of Professional Speculation*" written by Trader Vic, highlights another great reversal pattern called "1-2-3." This pattern is also called "Three Point Reversal" or "ABC Reversal." Trader Vic's 1-2-3 reversal pattern is based on the Dow Jones Theory-change of trend. Prices that are rising or falling must break a trend line. In an uptrend, prices will stop making higher highs (for shorts) or lower lows (for longs) in a downtrend. During the uptrend, prices try to reach the recent high, but may fail to hold and close above the high. During the downtrend, prices may try to reach the recent low and may fail to close below the low. This provides a potential signal.

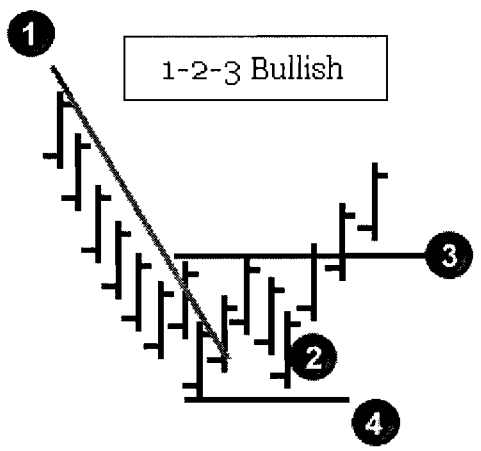
The criteria for a 1-2-3 pattern taken from Trader Vic's Book is as follows:

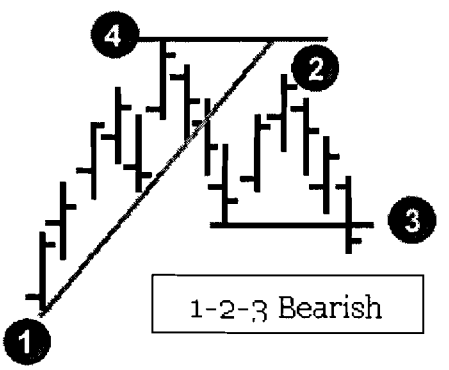
1. A trend line "breakout" or "breakdown" from the current trend.
2. A "test" and "failure" of the previous "high" or "low" after the trend line breakout or breakdown.
3. The breakout or breakdown of a "swing high or "swing low" prior to the rule 2.

Trade: After a trend line breakout or breakdown and re-test of "swing low/swing high," a sell signal is generated in uptrend when prices close below the "swing low". In downtrends, a buy signal is generated when prices close above "swing high."

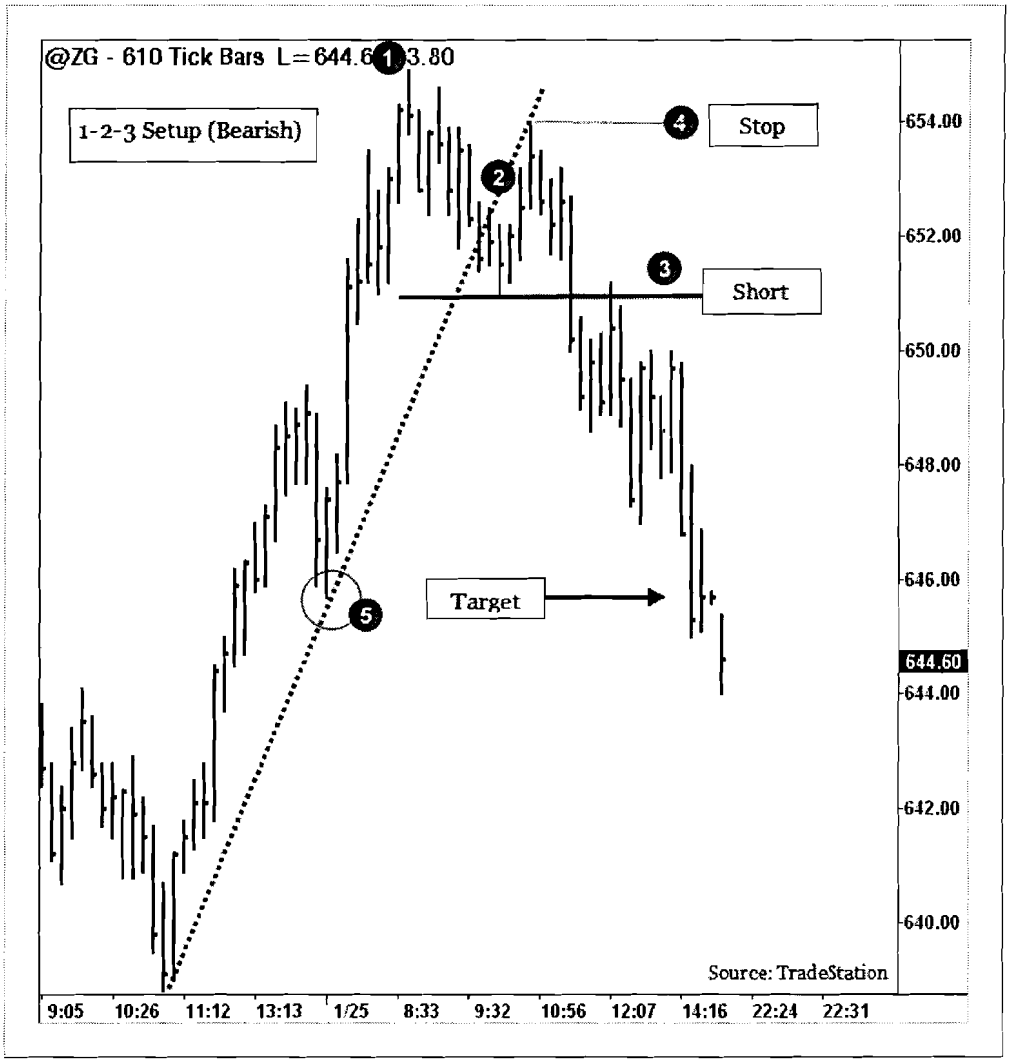
Target: The target is placed at the "swing low" prior to the "new high" in 1-2-3 "bearish setup" and "swing high" prior to the "new low" in 1-2-3 "bullish setup."

Stop: Place a "stop" order above the "swing high" in 1-2-3 "bearish setup" (Short) and below the "swing low' in a 1-2-3 "bullish setup" for long trades.





Trading Trader Vic's 1-2-3 Bearish

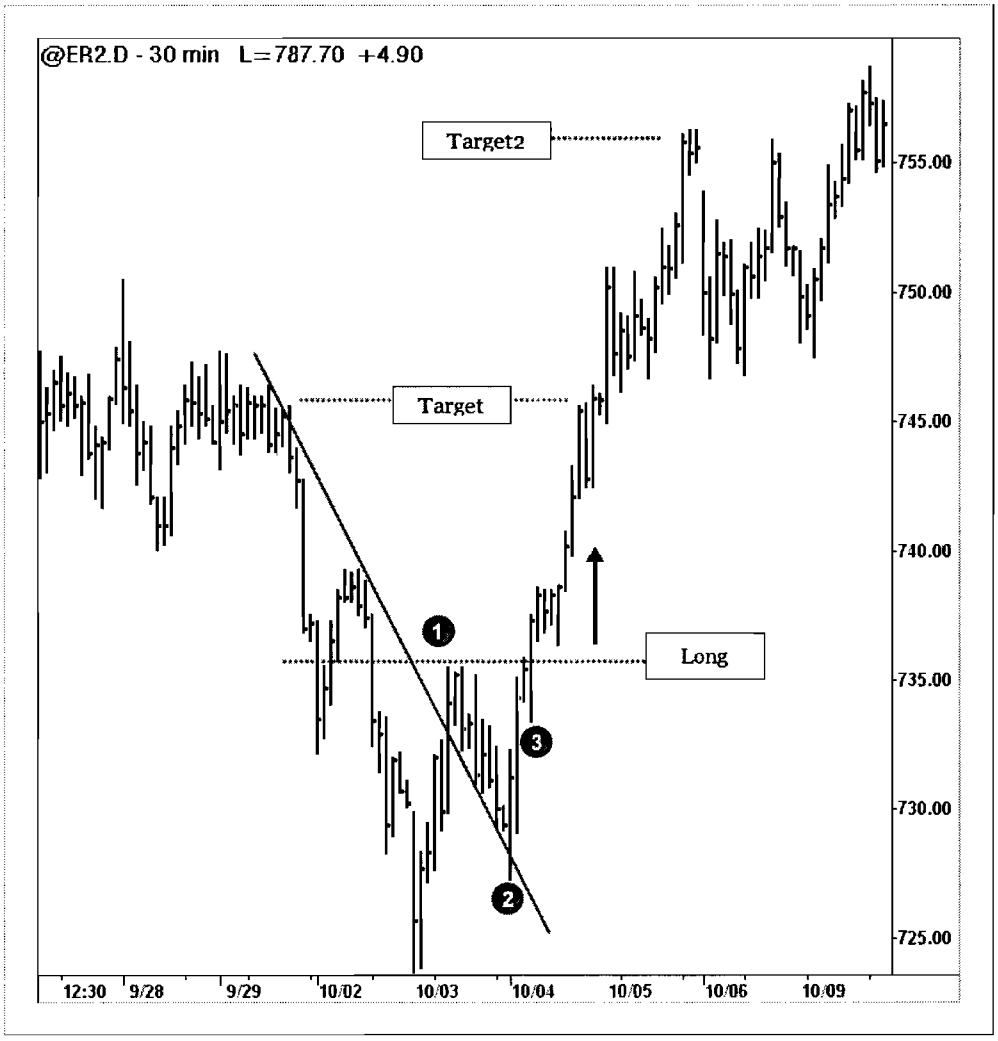


Trading Trader Vic's 1-2-3 Bearish Pattern

The example above illustrates Trader Vic's 1-2-3 "bearish setup" from the Gold futures 610 tick chart. Gold made a new high of 654 at bar (1). After a "new high," Gold retraced and traded lower to break the trend line at 651 (bar 2). Gold attempted to trade higher and re-tested trend line but could not close above it. After bar (4), prices closed below the low of bar(2) to signal a short trade.

1. Enter a "short" trade below the low of the "swing low" at 651.
2. Place a "stop" order just above the trend line at 654.
3. Place a "target" at the swing low prior to "new high" at 645.5

Trading Trader Vic's 1-2-3 Bullish



Trading Trader Vic's 1-2-3 Bullish Pattern

The above example illustrates a 1-2-3 Bullish pattern setup from the Russell Emini (ER2) 30 minute chart. ER2 made a new low at 724.5 and reversed its trend to the upside and traded above the trend line. After a few bars, ER2 tried to retest the lows at bar (2). At bar (3), ER2's prices reversed and traded above the recent "swing high" to trigger a "long" trade.

1. Enter a "long" trade above the "swing high" at 735.5
2. Place a "stop" order below the trend line low at 726.
3. A "target" was set at the previous "swing high" at 745.

11.4. Pipe Pattern

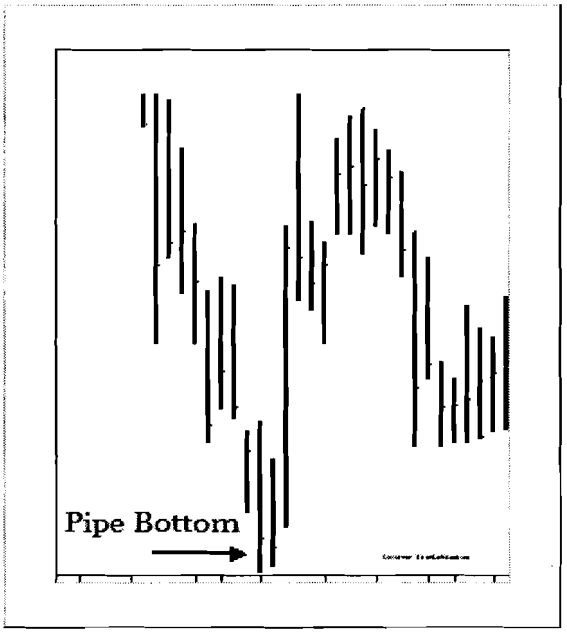
Pipe Pattern

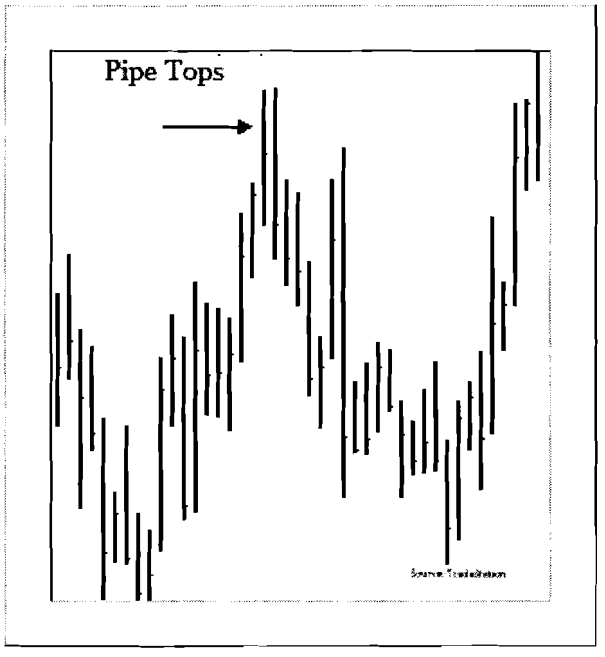
"Pipe" patterns form at market tops or market bottoms due to price exhaustion. Usually the first "Pipe" is a spike in prices and then followed by another spike by at least a similar length in the opposite direction. As the name suggests, the "Pipe pattern" looks like two parallel lines which form at the market extremes. "Pipe" patterns must be very distinct compared to the rest of the bars and must be visually obvious in the chart. "Pipe" patterns can also form during the intra-day rallies or intra-day sell-offs, but they are more reliable in daily and weekly charts. Daily "Pipe" patterns are illustrated by two bars showing opposite sentiment spanned by a significant time. Pipe pattern trades are entered in the opposite direction of a current trend. "Pipe" patterns are rare, and are one of the best patterns to trade.

Trade: Although, the "Pipe" pattern is a very successful pattern, it must have a clear confirmation prior to trades. For a "Pipe top" pattern, prices must trade below the low of the "lowest low" of the two pipes to enter a "short" trade. For a "Pipe bottom" pattern, prices must trade above the "highest high" of the two pipes to enter a "long" trade.

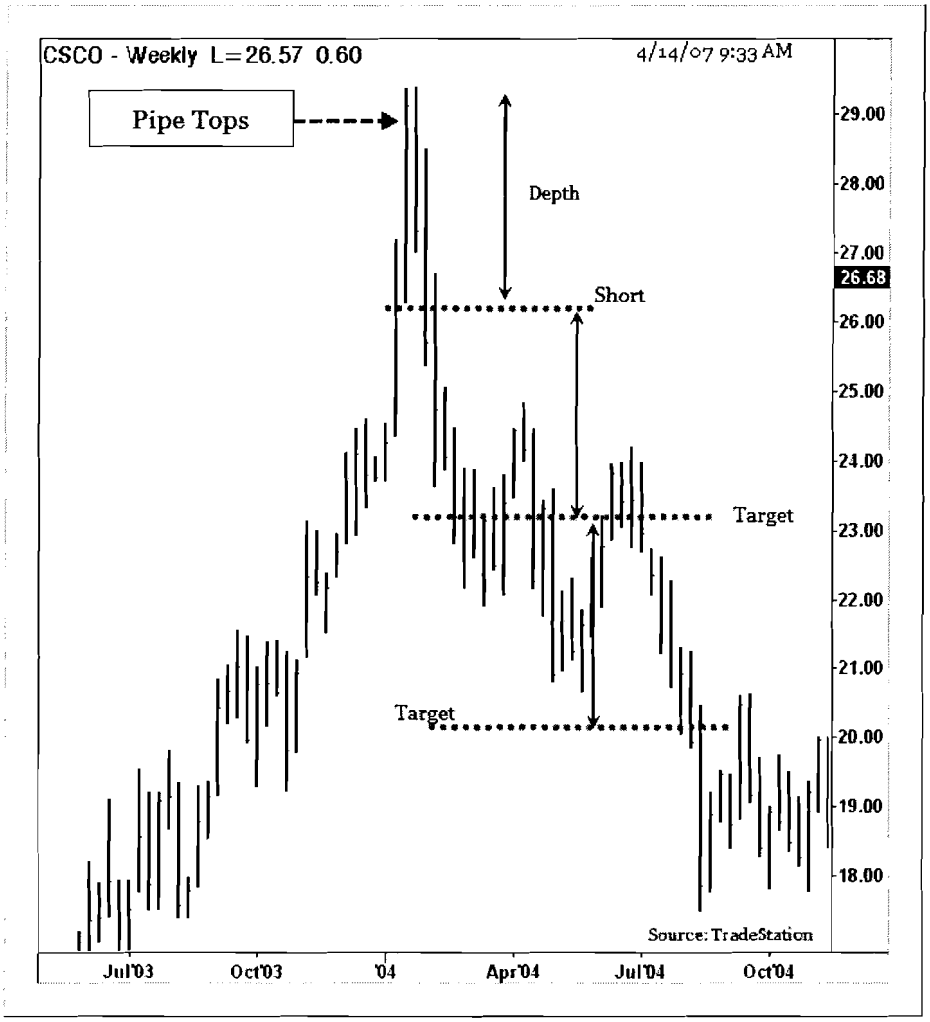
Stop: For a "Pipe bottom" pattern, place a "stop" order below the "lowest low" of the pattern. For a "Pipe top" pattern, place a "stop" order above the "highest high" of the pattern.

Target: The "Pipe" pattern provides an excellent opportunity to trade for low risk and high reward. The first target for a "Pipe bottom" pattern is the length of the larger of the two Pipes. The second target is the twice the length of the largest Pipe above the trade entry. Similarly, for a "Pipe top" pattern, the first target is the length of the largest of the two Pipes, and second target is the twice the length of the largest of the two Pipes below the trade entry.





Trading Pipe Top Pattern

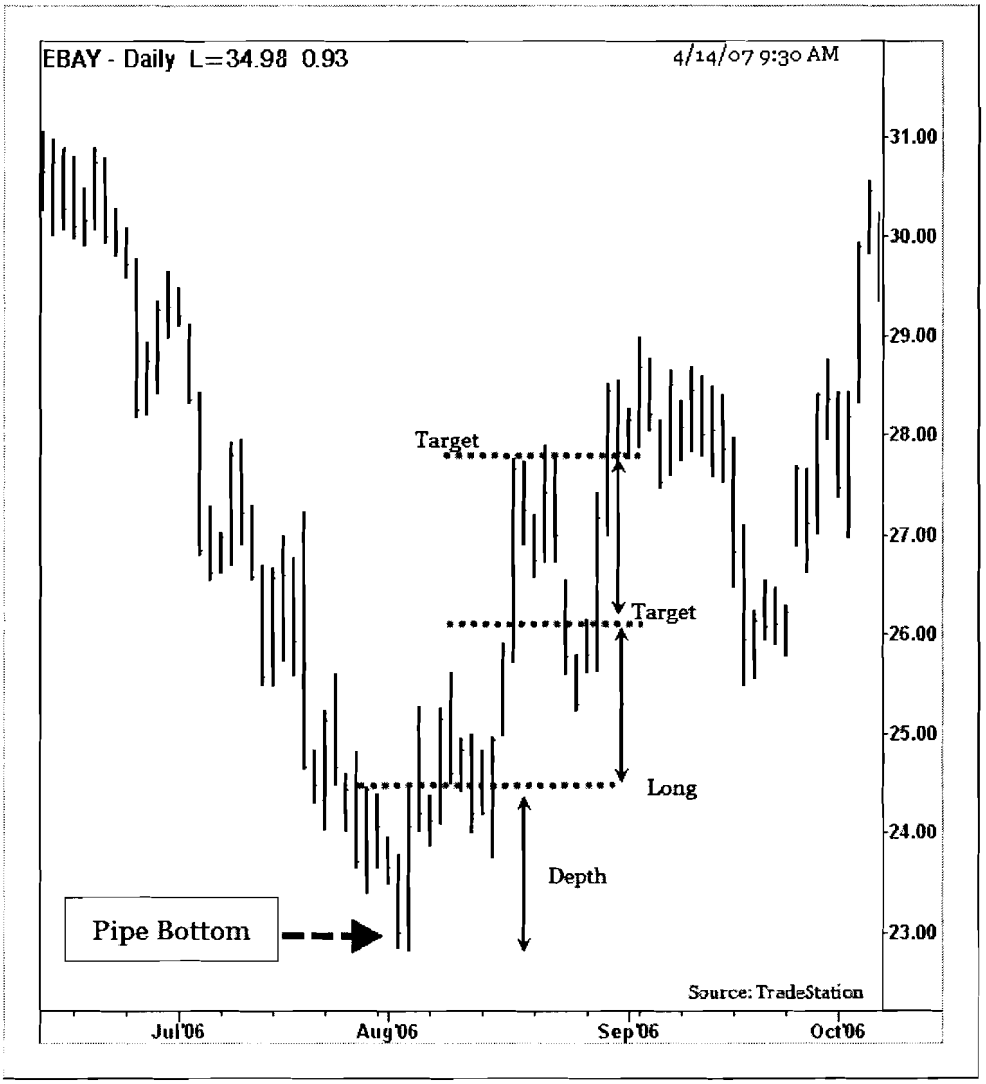


Trading Pipe Top Pattern

The example above illustrates a formation from Cisco's weekly chart. After a prolong rally in 2003, Cisco reached its exhaustion level at $29 and posted a reversal bar to complete the "Pipe top" pattern. The lowest low of the "Pipe top" pattern is at $26.25.

1. Enter a "short" trade below the "lower low" of the "Pipe top" pattern at $26.
2. A "stop" order is placed above the high of the "Pipe top" at $29.
3. The length of the larger of the two Pipes is $3. The first target is placed at $3 below the entry level from $26. The second target is placed at $6 below the entry level from $26.

Trading Pipe Bottom Pattern



Trading Pipe Bottom Pattern

The example above illustrates a "Pipe bottom" pattern formation from the EBay daily chart. In 2006, EBay sold off from the $32 level to the $23 level. At the beginning of August, 2006, EBay posted a "Pipe bottom" reversal bar at $23. The larger of the two "Pipe" bars are at $24.5 and closed above the previous bars' high. The length of the largest Pipe bar is $1.5.

1. Enter a "long" trade above the high of the second bar at $24.50.
2. Place a "stop" order below the low of the "Pipe" pattern at $22.75.
3. Place the first target at $1.5 above the entry of $26. The second target is placed $3 above the entry at $27.50.

11.5. M and W Patterns

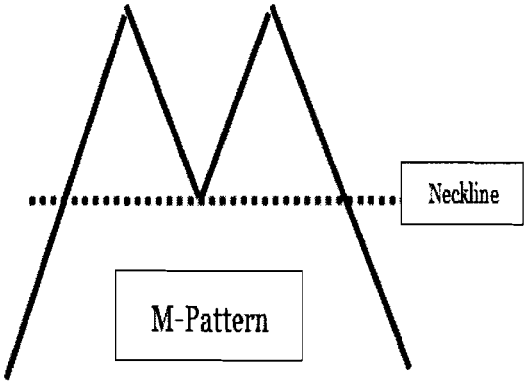
M and W Patterns

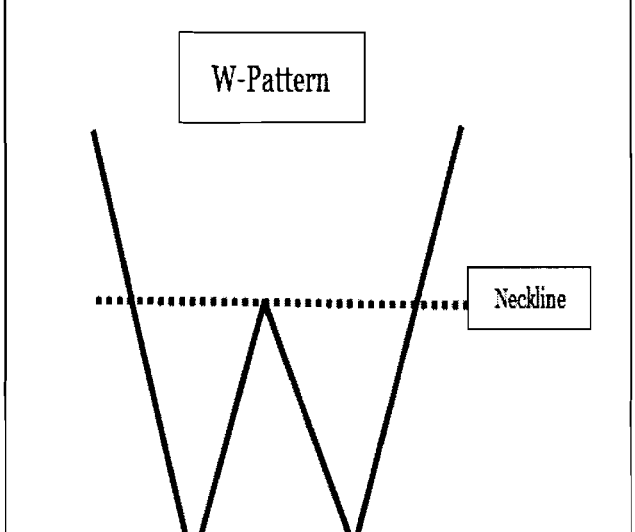
"M" and "W" patterns are usually considered as M-Top and W-Bottom patterns with few differences. M and W Patterns usually continue the prior trends where as M-Top and W-Bottom patterns terminate the trends. Frequently, "M" and "W" patterns form during the congestion zones. "M" patterns rarely form at the "market bottoms" and "W" patterns rarely form at the "market tops." The volume concept of timing is very similar to their counter parts "Double tops" and "Double bottoms." These patterns are also closely related to "Triple tops" and "Triple bottoms," and "Head and Shoulders" or "Inverse Head and Shoulder" patterns.

Trade:
Trades are initiated at the breakdown of the neckline/hump level. For W-Bottoms, trades are initiated at the breakout of the neckline/hump level. Enter a "long" trade above the high of the breakout bar at neckline level, and for M-Tops enter a "short" trade below the low of the breakdown bar at neckline level.

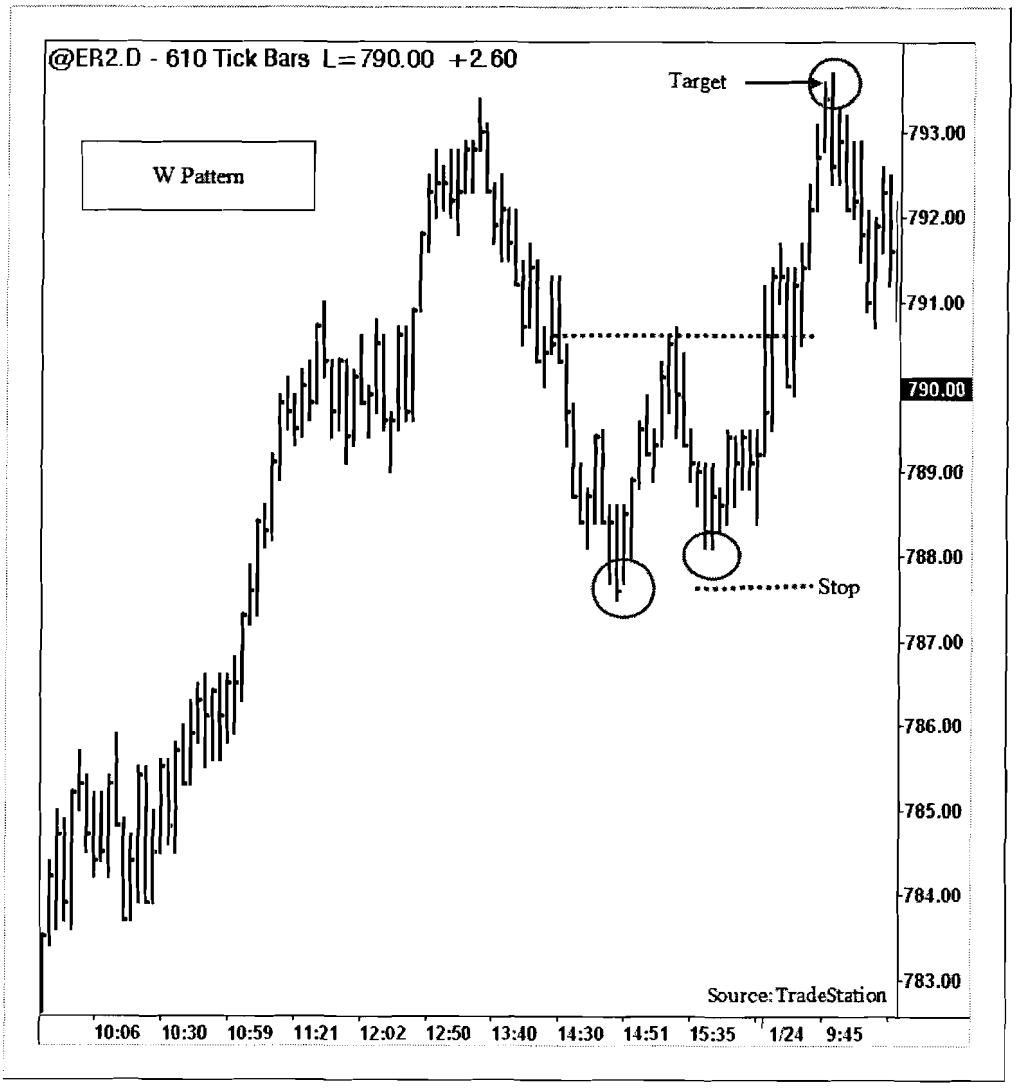
Targets:
In both patterns, the targets are set at the pattern high for W-Pattern and pattern low for M-Pattern.

Stop:
For M-pattern, the trade is protected with a stop loss above the pattern high. For W-Pattern, the trade is protected with a stop loss below the pattern low.





Trading W-Pattern

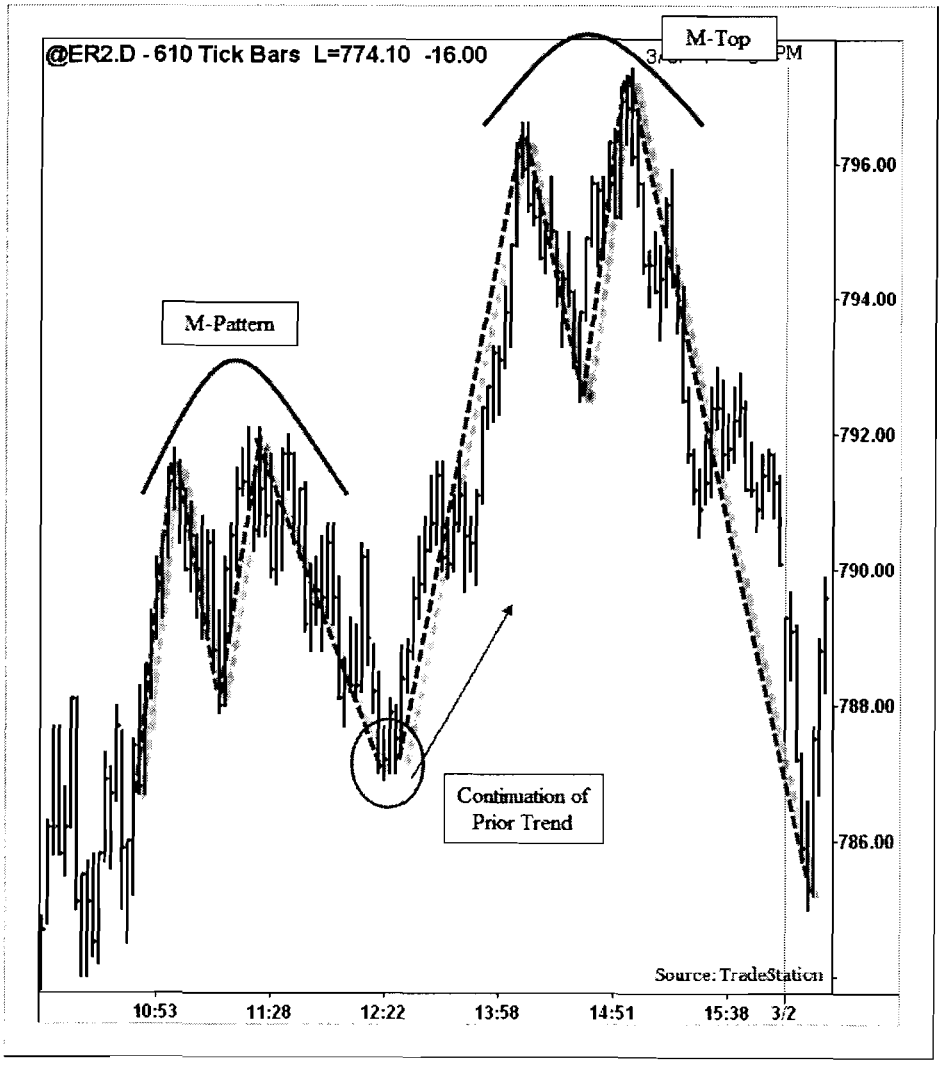


Trading W-Pattern

The example above illustrates a W-Pattern formation at the market highs from the Russell Emini (ER2) chart. After confirmation of the second leg, a "long" trade is entered at the breakout of the neckline/hump level.

1. Enter a "long" trade above the high of the breakout bar of the hump level.
2. Place a "stop" order below the low of the pattern.
3. Set a "target" at the "swing high" prior to the first leg.

Trading M-Pattern



Trading M-Pattern

The example above illustrates a combination of M-Pattern and M-Top. M-Pattern is an occurrence where prices form a M-shape pattern in a congestion zone prior to the trend continuation. M-Top is a clear "top" formation and reversal of trend change. M-Pattern and M-Top are tradable and have clear trading rules and have high reliability. In addition, they are part of 5-point Gartley structures with similar trading rules as Gartley patterns. The major difference between these patterns is M-Pattern continues in the prior direction compared to the M-Top which terminates the prior trend.

11.6. Round Top Pattern

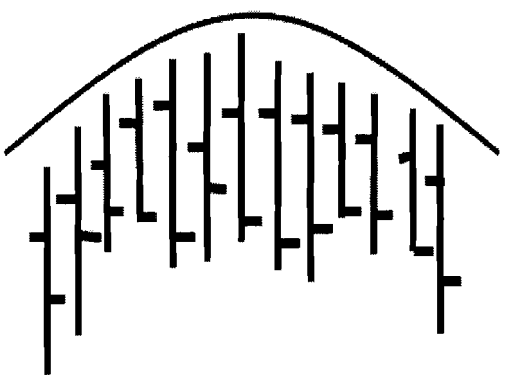
Round Top Pattern

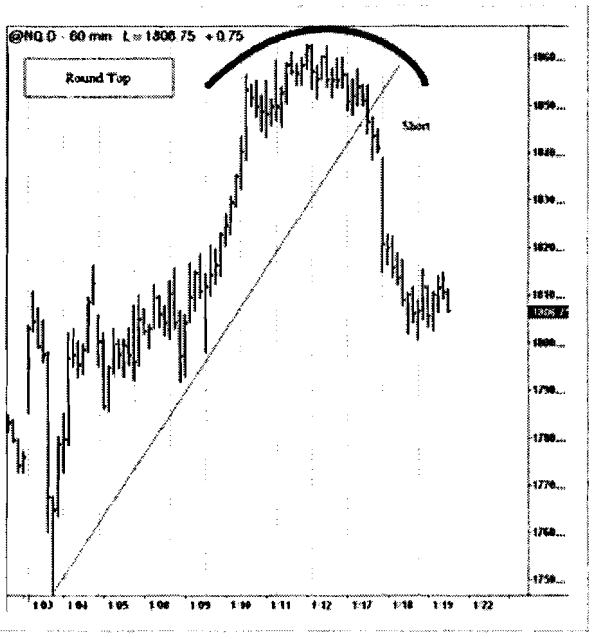
"Round Top" formations are usually reversal patterns that generated over a long periods of time. Indecisive markets move in slow and gradual changes near the tops and bottoms. "Round Top" patterns are formed when prices trade in a tight range making sporadic "lower highs" and "higher lows". Usually the volume traded in this pattern is very low compared to the prior trend before the pattern formation. Breakdowns from "Round top" patterns will be fast and sharp when price movement occurs. "Round top" patterns also have a high failure rate.

Trade: A trend line is drawn connecting the "Round top" to the previous swings to find the possible trade opportunity. A close below the trend line indicates a trend change and provides a trading opportunity. A "short" trade is entered below the low of the breakdown bar.

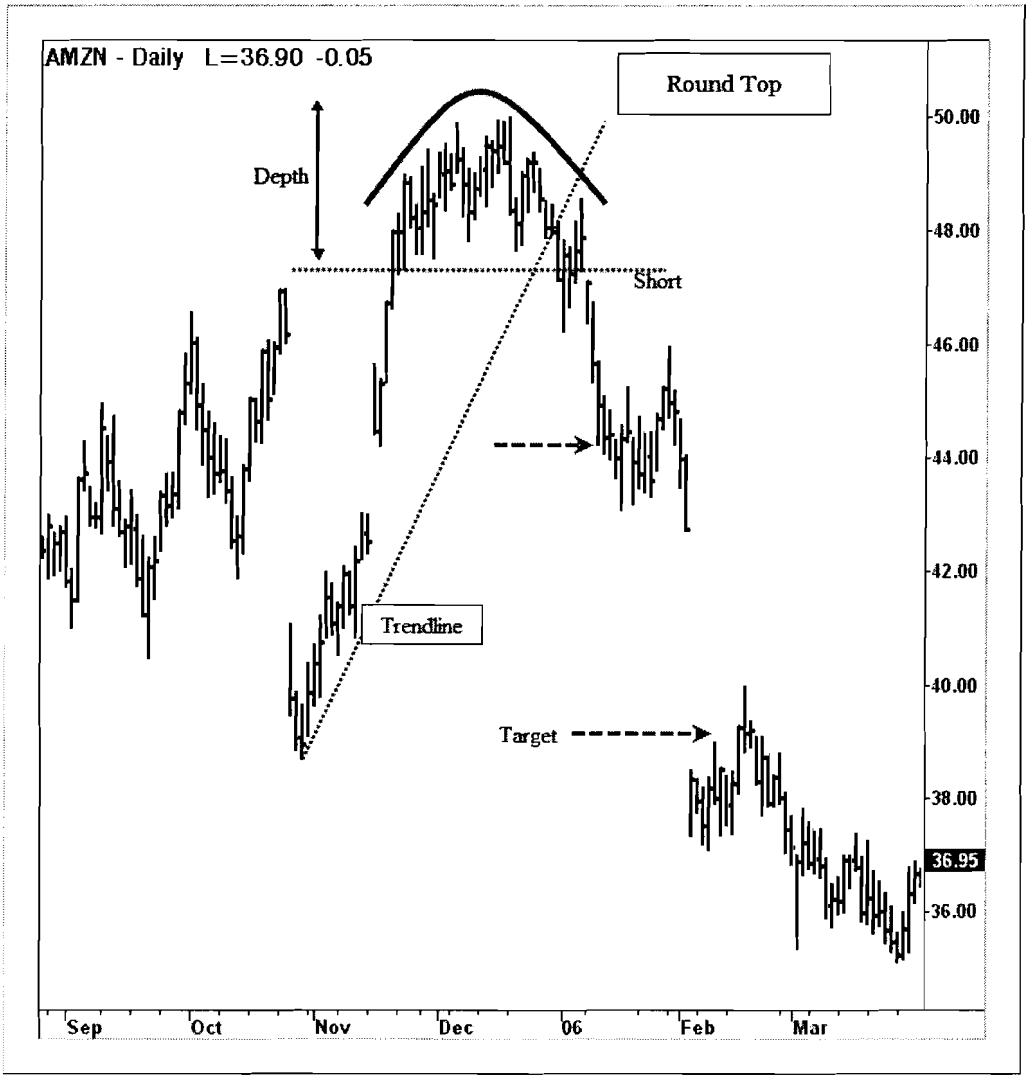
Target: Successful "Round top" patterns have very sharp moves to the downside from the breakdown levels. There may be two targets possible. The first target is set at the depth of the "Round top" pattern from the trend line breakdown level. The second target is set at or near the prior "swing lows" before the pattern formation.

Stop: For trades taken on inclined trend line breakdowns, place a "stop" order above the trend line (on close basis) and for trades using horizontal trend line breakdowns, use the mid point of the "Round top" pattern to protect the trade.





Trading Round Top Pattern

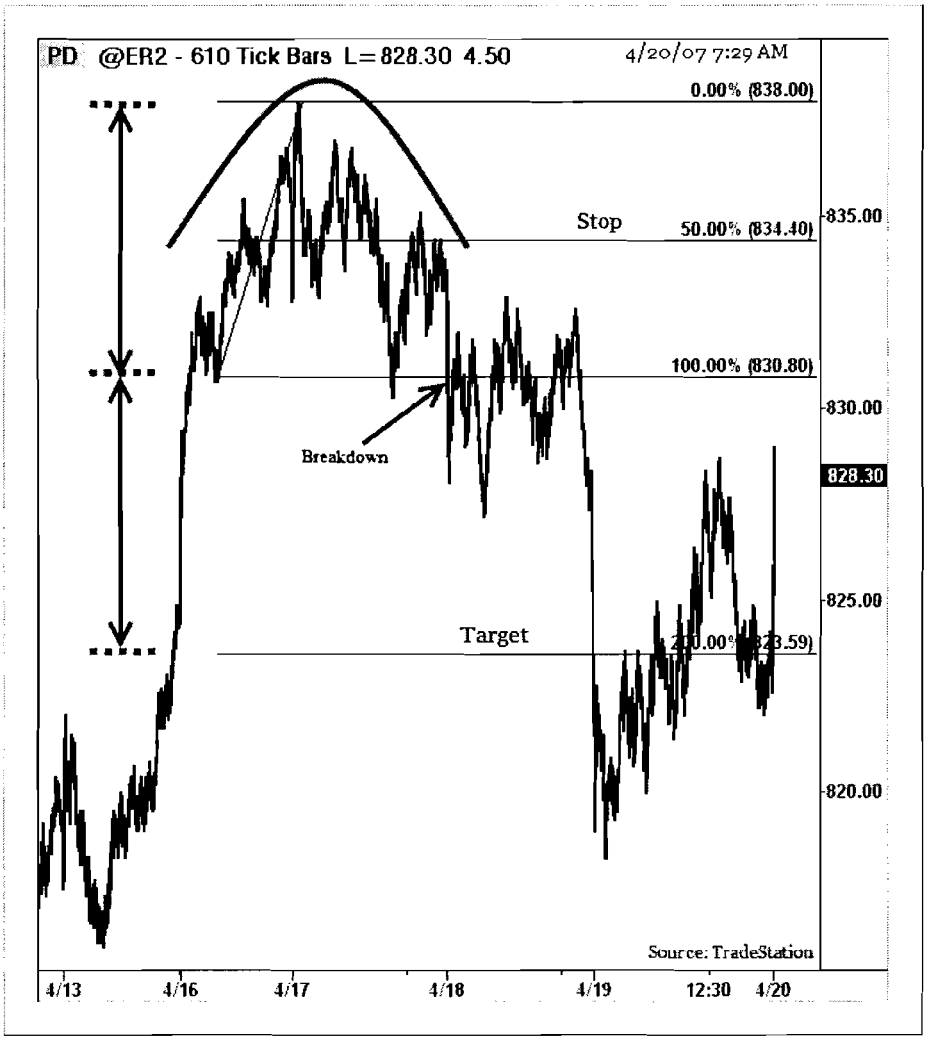


Trading Round Top Pattern

The example above shows a "Round top" pattern formation from the Amazon (AMZN) daily chart. From November 2006 to January 2006, Amazon formed a "Round top" pattern. A trend line is drawn connecting the previous swing low to the "Round top." "Round top" depth is measured for a target range. In January 2006, Amazon closed below the trend line to confirm a "Round top" breakdown.

1. Enter a "short" trade below the trend line at $47. The depth of the pattern is $3.
2. Set a first target at $44 (depth from entry). Set another target near the "swing low."
3. Enter a "stop" order above the trend line (on close basis). A long-term trade stop loss is set above the high of the "Round top" pattern.

Trading Round Top Pattern



Trading Round Top Pattern

The example above illustrates a "Round top" pattern formation from the Russell Emini (ER2) 610 tick chart. From April 16, 2007 to April 18, 2007, ER2 made a "Round top" formation. On April 18th, ER2 closed below the key support areas of "Round top" formation to signal a "short" trade.

1. Enter a "short" trade below the low of the breakdown bar at 830.
2. Place a "stop" order above the 50% depth range of the "Round top" pattern.
3. Target 100% of the "depth" from the breakdown level.

11.7. Round Bottom Pattern

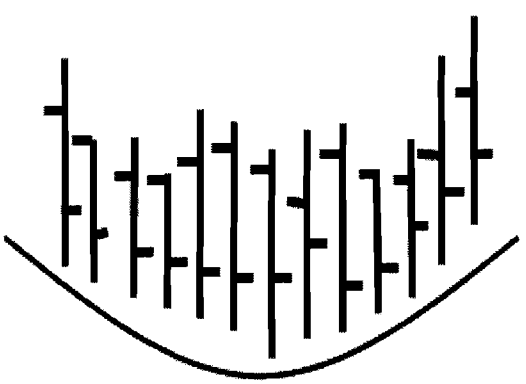
Round Bottom Pattern

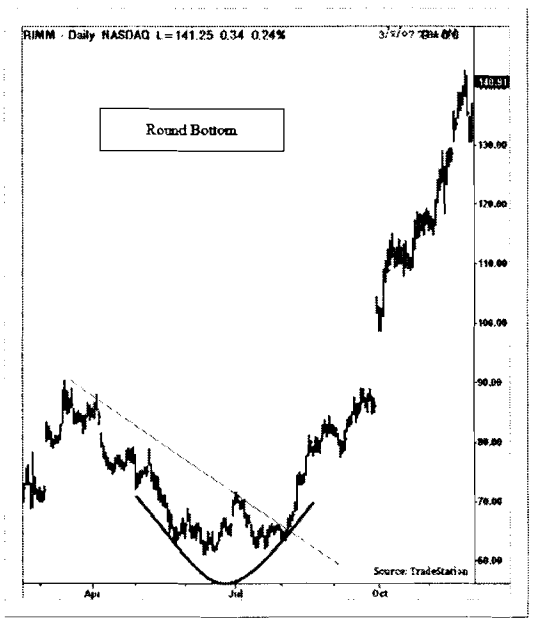
"Round Bottom" patterns are also called "saucers" and they form at the market bottoms. "Round bottoms" form after a prolonged down-trend, slow and gradual markets. "Round bottoms" are relatively reliable patterns and are easy to spot (in curve form) at the bottom and have weak volume markets. "Round bottom" trading is similar to a "rectangle" pattern trading and they may be better visible in higher time-frames. A trend line is drawn connecting the "swing highs" of the "round bottom" pattern to initiate the trades at the trend line breakout levels. "Round bottom" patterns with a long base may provide more profitable trades.

Trade: A trend line is drawn connecting previous "swing highs" prior to the "Round bottom." Price trading above the trend line signals a breakout and a "long" trade. Enter a "long" trade above the high of the breakout bar from the trend line.

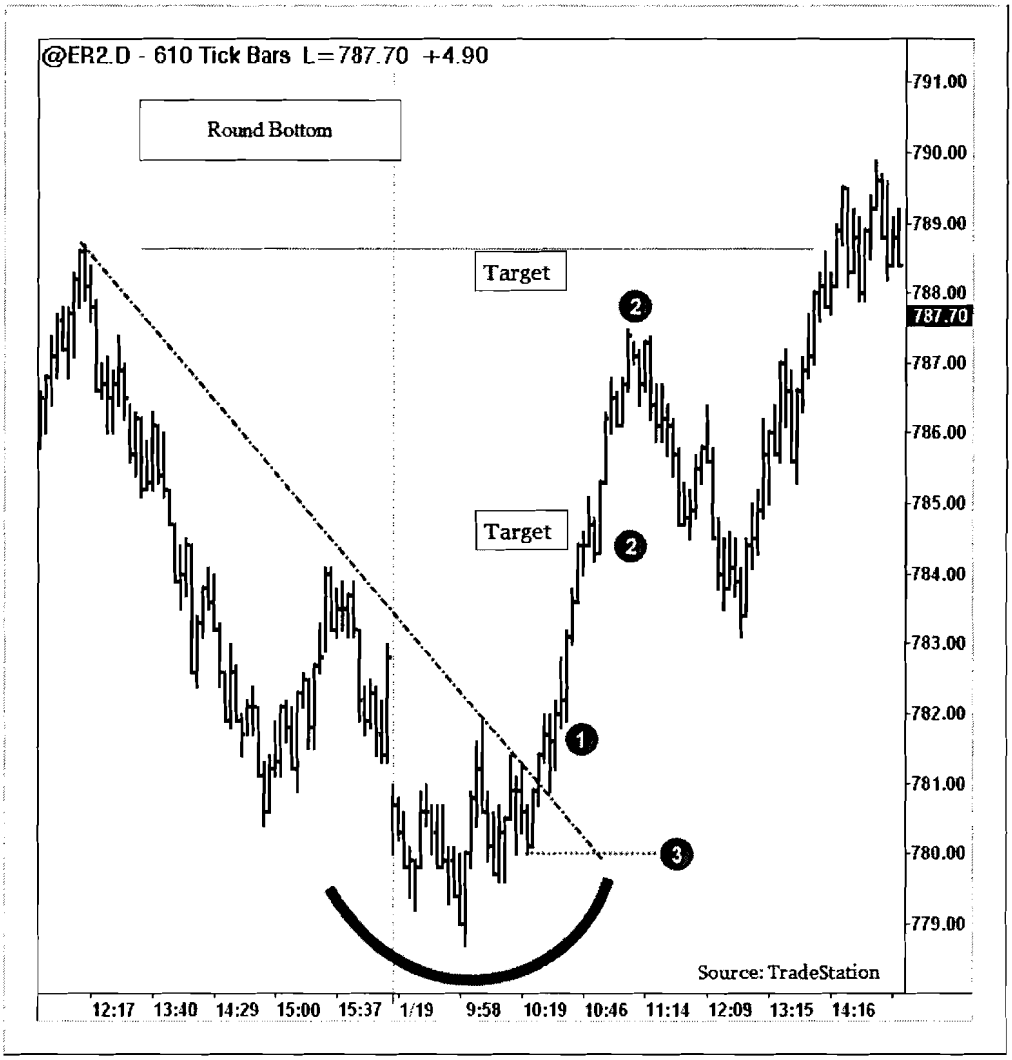
Target: Two potential trade targets are possible in "Round bottom" patterns. The first target is the depth of the "Round bottom" pattern from the breakout level. The second target is the previous "major swing highs".

Stop: The "Round bottom" pattern trade is based on the trend line breakout. Pattern failure can occur if the market closes below the trend line for a series of bars. Place a "stop" order below the trend line to protect the trade.





Trading Round Bottom Pattern

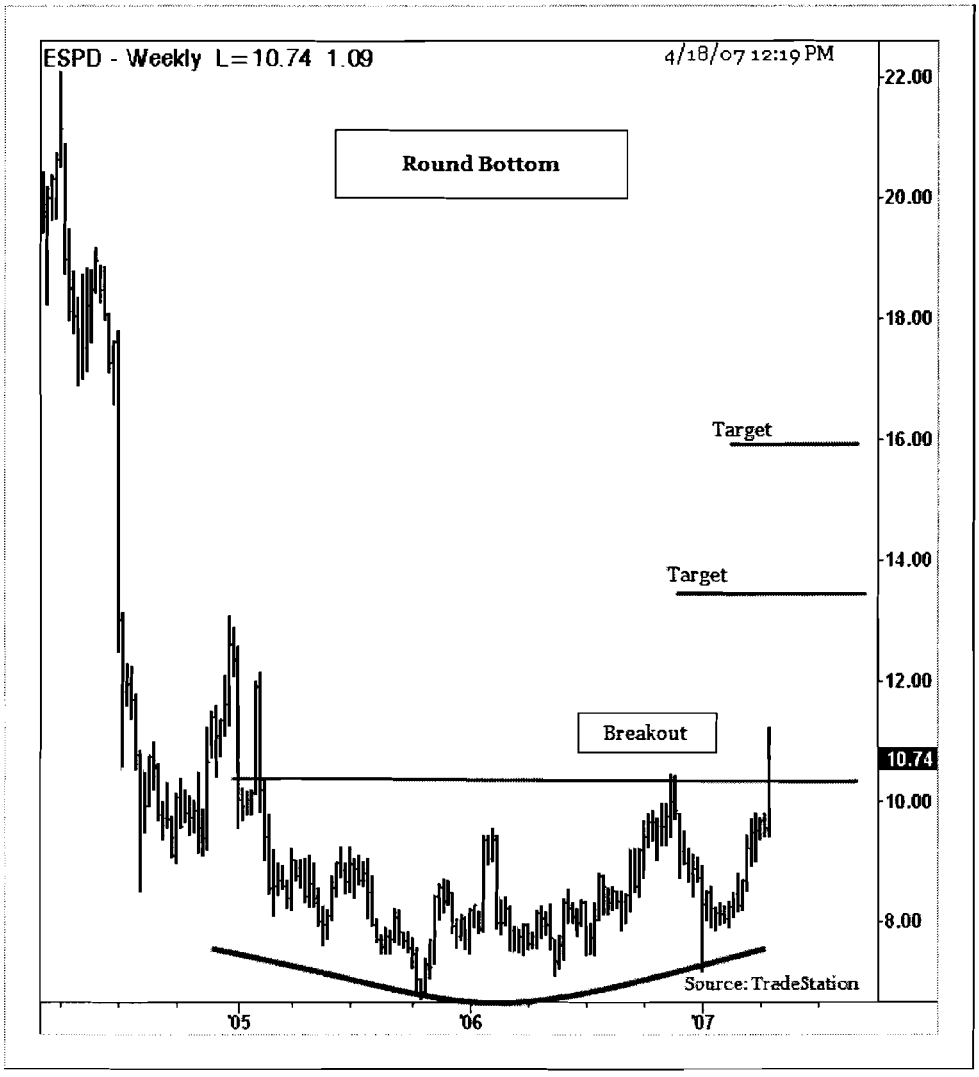


Trading Round Bottom Pattern

The example above illustrates a "Round bottom" pattern from the Russell 2000 Emini (ER2) futures 610 tick chart. On January 19, 2007, ER2 made a series of highs and lows to form a "Round bottom" pattern in the first hour. A trend line is drawn connecting the previous "swing high" and the "Round bottom."

1. Enter a "long" trade above the high of trend line breakout bar.
2. Place "targets" at previous swing highs prior to the "round bottom" pattern.
3. Place a "stop" order below the trend line.

Trading Round Bottom Pattern



Trading Round Bottom Pattern

The example above illustrates a "Round bottom" pattern formation from the eSpeed (ESPD) weekly stock. ESPD traded in a narrow channel (from $7.50 to $10.25) range from January 2005 to April 2007. A horizontal trend line is drawn connecting the highs of the "Round bottom". The depth of the "Round bottom" pattern is about $2.50. In April 2007, ESPD traded outside the channel and closed above recent "swing high" signaling a potential "long" trade.

1. Enter a "long" trade above the high of the "swing high" at $10.75.
2. Place a "stop" order below the recent "swing low" at $8.00.
3. Set "targets" at patterns' depth above the breakout level. Secondary targets may be set at previous major swing high levels.

11.8. V-Top Pattern

V-Top Pattern

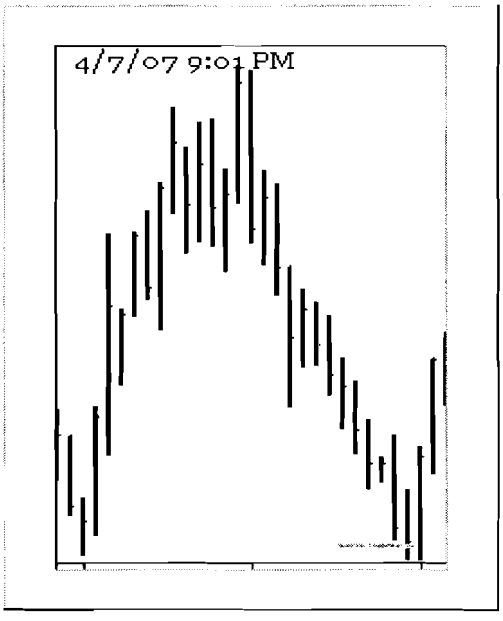
"V-Top" and "V-Bottom" are extreme patterns that are easy to spot in a chart. "V-top" patterns (Inverted V) ascending market action and angle of ascent is very sharp with increased volume. Once a top is made, a sharp price reversal occurs and the descending angle usually will mirror the ascending angle. There will be clear signs at the top (A Dark Cloud or Island Top pattern) before a reversal can occur. Most of the time, prices will retrace all the way down to the start of the rally to make it a true (inverted V) "V-top" formation.

Although the pattern is easy to spot, trading opportunities are challenging due to its steep ascent and the fear associated with it. A trend line is drawn connecting the swing lows in a V-Top pattern. A breakdown below this trend line offers a potential opportunity to short.

Trade: Connect "swing lows" in the ascent of "V-top" pattern. A close below the trend line signals a breakdown. Enter a "short" trade below the low of the breakdown bar.

Target: After price reversal, "V-top" patterns tend to travel in the similar angle as the ascent angle. A target is set at the "swing low" of the pattern before the rally.

Stop: Place a "stop" order above the close of the trend line. A longer-term stop would be above the high of the "V-top" Pattern.



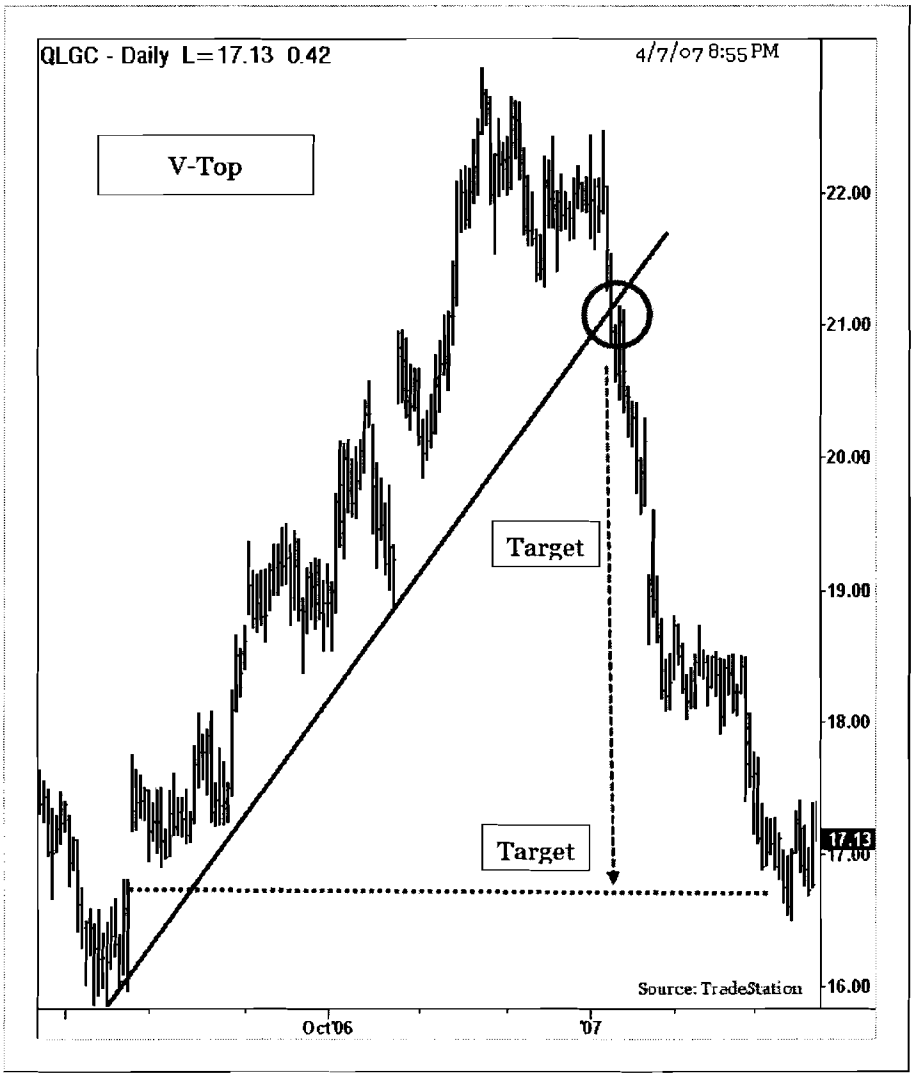
Trading V-Top Pattern

Trading V-Top Pattern

The example above shows a "V-top" formation from the daily Gold futures chart. Gold futures rallied during year 2005 and in part of year 2006. In May 2006, Gold made a new high and closed near 760. A Dark Cloud candlestick pattern signaled a reversal in Gold as it started to descent. By mid May 2006, Gold closed below the trend line at 680 to signal a potential "short" trade.

1. Enter a "short" trade below the trend line at 680.
2. Place a "stop" order above the trend line at 705 to protect the trade.
3. Place a "target" at the "swing low" prior to the "V-top" rally at 580 level.

Trading V-Top Pattern



Trading V-Top Pattern

The example above illustrates a "V-top" pattern formation from the QLogic daily chart. The chart shows a "spike and ledge" formation after the "V-top" formation. A "ledge" formation after a "spike" is usually a strong confirmation of potential reversal sign. A breakdown below the ledge will lead to a much stronger down trend. A trend line is drawn connecting the "swing lows" below the "ledge" formation. A breakdown below the "ledge" formation confirms a "V-top" pattern.

1. Enter a "short" trade below the low of the breakdown bar.
2. Place a "stop" order above the "ledge" pattern high.
3. Place a "target" at a major "swing low" or "gap" area approaching the "V-top."

11.9. V-Bottom Pattern

V-Bottom Pattern

As the name implies, "V-Bottom" patterns resemble a "V" shape. "V-Bottoms" are formed after a steep decline followed by a rally to reach the top of the pattern. "V-bottom" patterns form quite often and are not always easy to detect until part of the formation is complete. "V-bottom" patterns usually have a single day of spike run-down or exhaustion sell-offs before the rally begins.

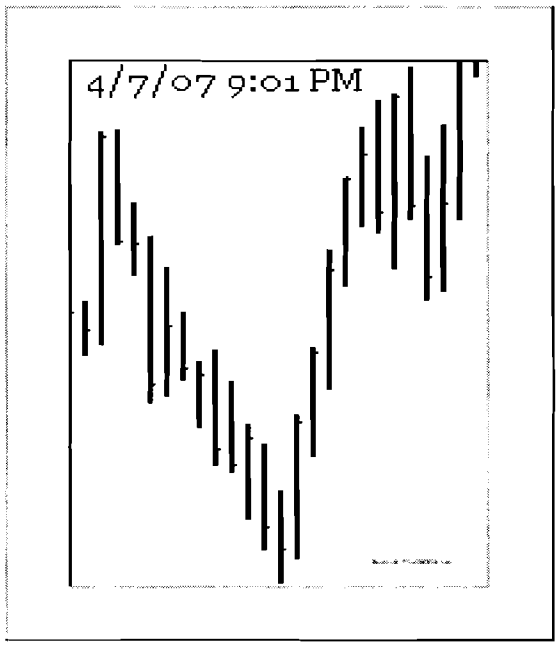
"V-bottoms" usually produce high volume on the "spike" or "exhaustion" day followed by even higher volume on the following days. Daily prices usually do not attempt to close near the "low" of the thrust days to signal a potential reversal pattern.

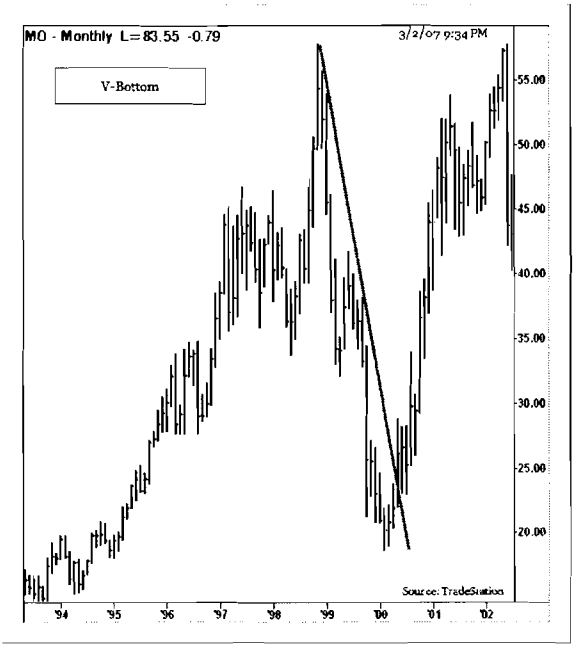
A trend line is drawn connecting the previous "swing highs" in the "V-bottom" pattern. A "confirmation" is signaled when the price closes above the trend line.

Trade: Wait for a confirmation above the trend line. Enter a "long" trade above the high of the breakout bar.

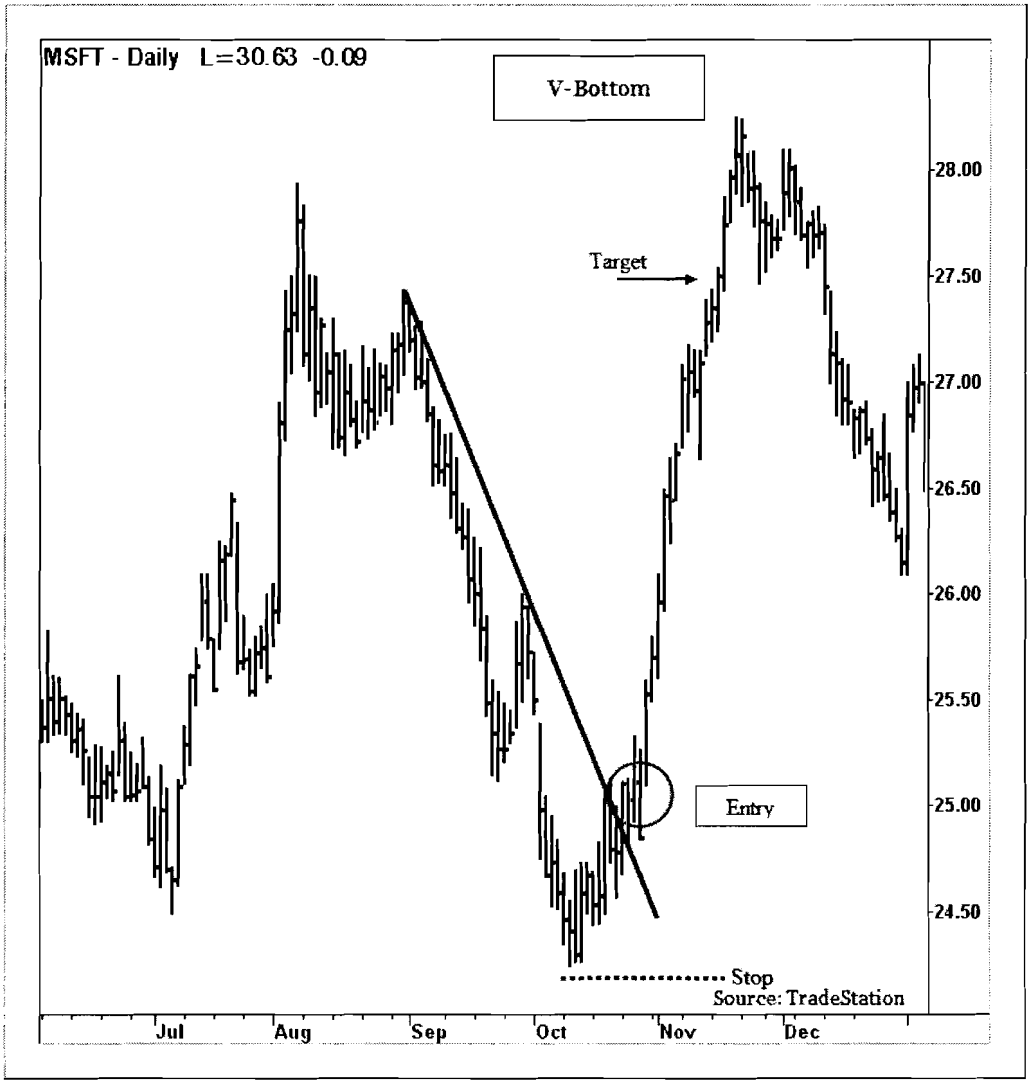
Stop: "V-bottom" failure can occur when prices close below the low of the "V-bottom" pattern.

Target: "V-bottom" patterns usually return to the prices at the top before another descent. Set targets near the "top" of the pattern.





Trading V-Bottom Pattern

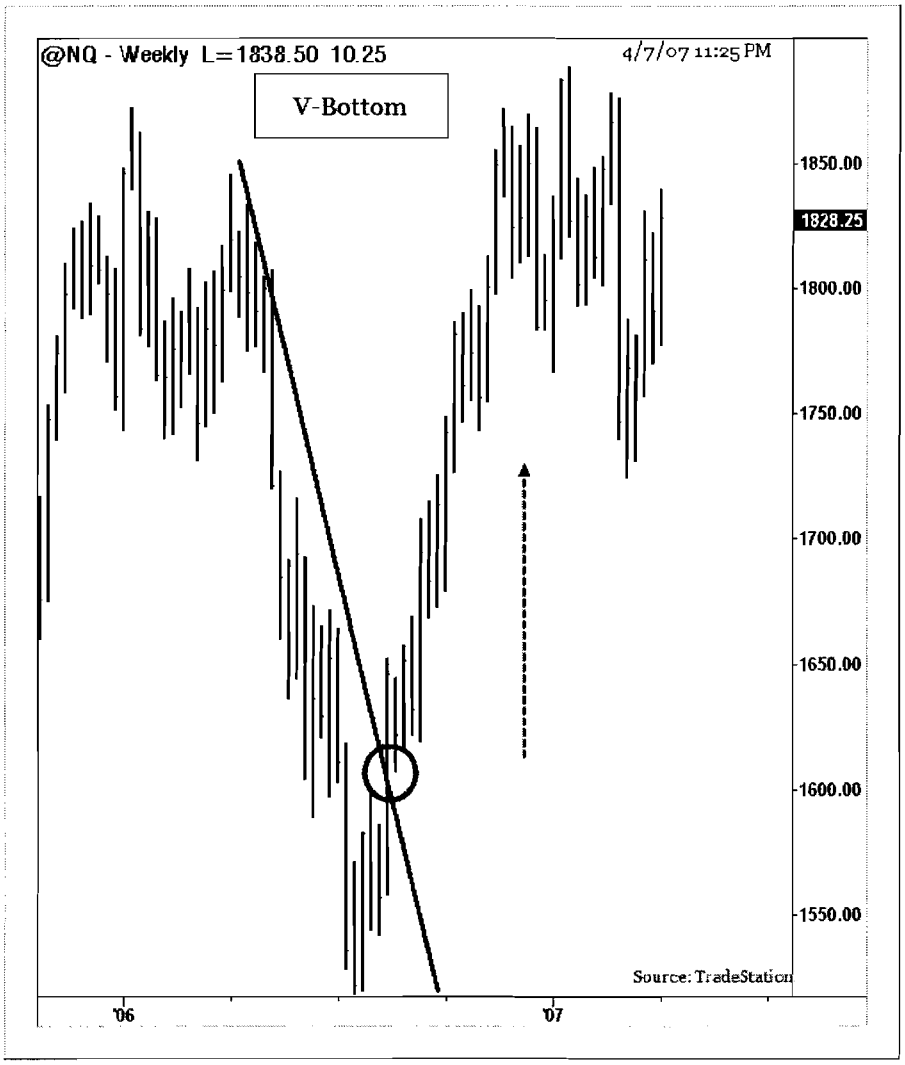


Trading V-Bottom Pattern

The example above illustrates a "V-bottom" pattern formation from Microsoft's daily chart. In August 2006, Microsoft made a high of $27.75 and retraced to $24 by October 2006. In anticipation of its Vista release, Microsoft rallied from October, 2006 to November2006 making a "V-bottom" pattern. A trend line is drawn in the above chart connecting the previous "swing high" and "V-bottom."

1. Enter a "long" trade above the high of the trend line breakout bar.
2. Place a "stop" order below the pattern low or "swing low."
3. Target the previous "swing high" prior to the "V-bottom."

Trading V-Bottom Pattern



Trading V-Bottom Pattern

The example above illustrates a "V-bottom" pattern from the NASDAQ Futures (NQ) weekly chart. From April 2006 to June 2006, NQ fell sharply and closed below 1500. In July 2006, NQ reversed and started to climb up. A trend line is drawn in the above chart connecting the "swing highs" to position the "long" trade. A close above the trendline signals the trend reversal and a "long" trade.

1. Enter a "long" trade above the high of the trend line breakout bar.
2. Place a "stop" order below the "V-bottom" pattern's low.
3. Target the previous "swing high" prior to the "V-bottom" pattern.

11.10. Double Top Pattern

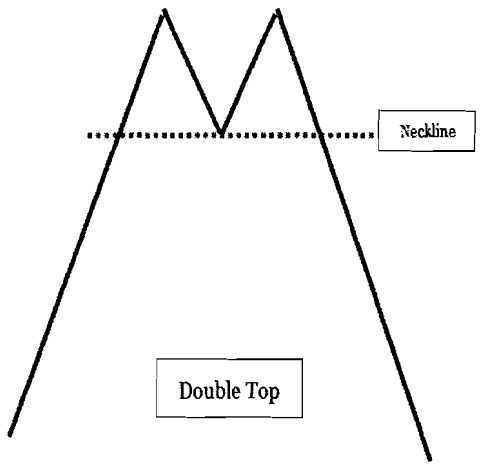
Double Top Pattern

"Double Top" patterns occur when prices fail to make new highs at significant previous high levels. "Double top" patterns are relatively reliable and easy to trade. Also, these patterns fail as they may potentially form "triple" or "multiple" top formations. "Double tops" usually signal the end of a bull run, depending on the width of the top formation. Volume in the first swing should be heavier than the volume on the second swing. In addition, the volume maybe heavier on the breakdown bars. If the breakdown volume is weaker, it may be signaling a "triple" or "multiple" top formation

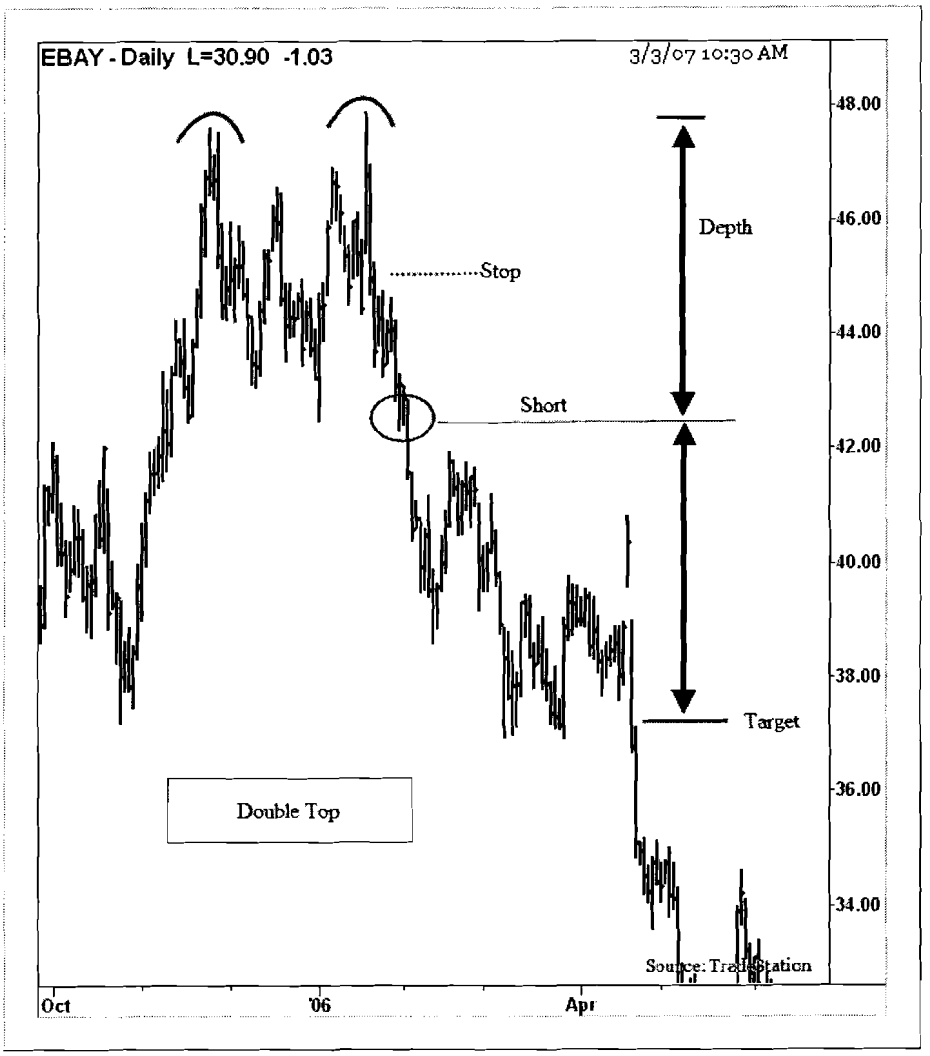
Trade:
A "Double top" pattern confirmation occurs at the breakdown level of "swing lows" at neckline. Enter a "short" trade below the previous "swing low" at neckline.

Target:
"Double Top" patterns do offer a good risk/reward ratio. Measure the distance between the top of the pattern to the neckline for potential target range from the trade entry.

Stop:
"Double tops" also fail and form "triple" or "multiple" top patterns. Usually the "Double top" pattern failure occurs when prices reverse and trade at the middle of the "Double top" pattern. Enter a "stop" order at the middle of the pattern range to protect the trade.



Trading Double Top Pattern

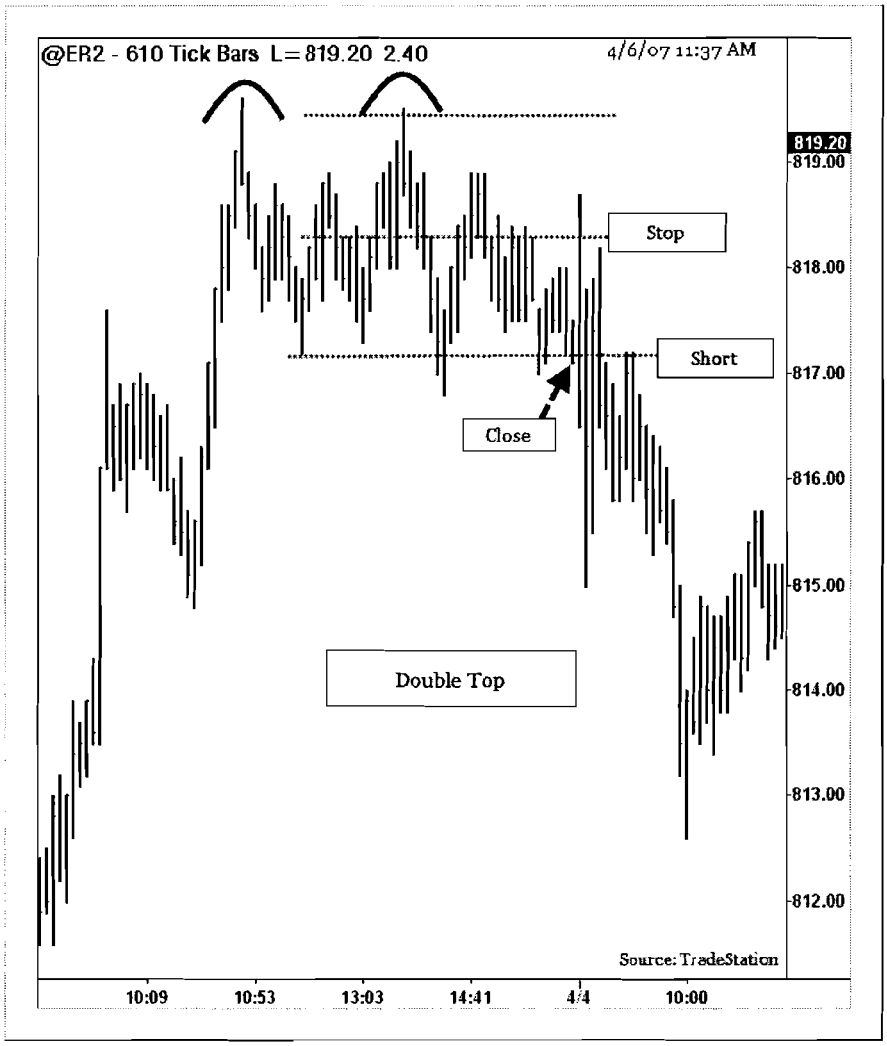


Trading Double Top Pattern

The example above illustrates a "Double top" formation from the EBay daily chart. EBay formed a "Double top" pattern from November 2006 to January 2007 around $47 level. Late January 2007, EBay started to decline from the "Double top" level and closed below $42. This close below neckline signaled a potential "short" trade. The depth of the "Double top" is $5.

1. Enter a "short" trade below the "low" of the breakdown bar at $42.50.
2. Protect with a "stop" order at the middle of the channel at $45
3. Place a "target" at the depth of the "Double top" pattern below the breakdown level to $37.50.

Trading Double Top Pattern



Trading Double Top Pattern

The example above illustrates a "Double top" formation from the Russell Emini 610 (ER2) tick chart. ER2 formed a "Double top" pattern on April 3, 2007 near the 819.5 level. The next day, ER2 started to decline from the "Double top" level and closed below the "swing low" of 816.5. Price closing below the neckline signaled a potential "short" trade. The depth of the "Double top" is 2.5 points.

1. Enter a "short" trade below the "low" of the breakdown bar at 816.5.
2. Place a "stop" order at middle of the "Double Top" channel at 818.5
3. Place a "target" at the depth of the "Double top" pattern below the breakdown level to 814.

11.11. Double Bottom Pattern

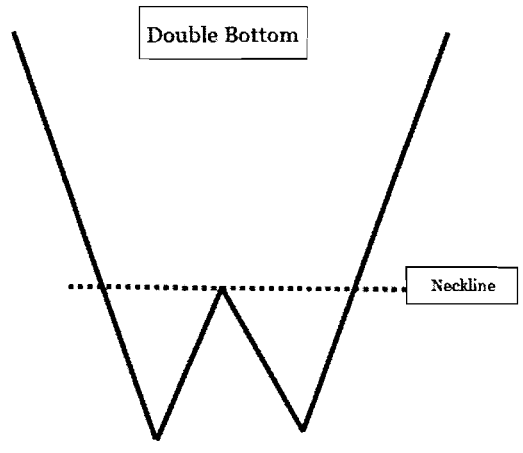
Double Bottom Pattern

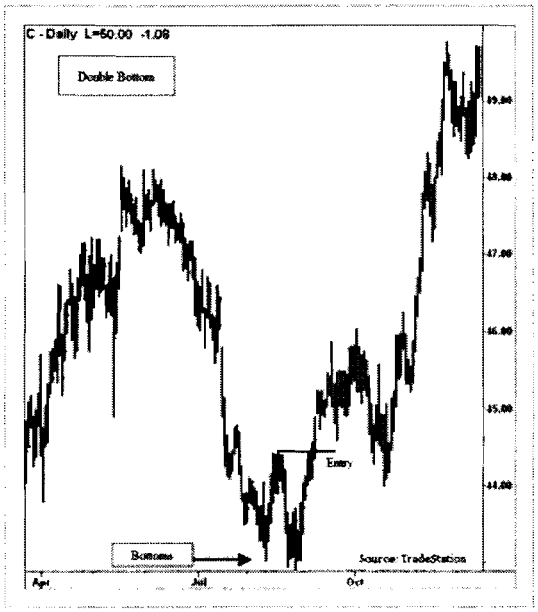
"Double Bottom" patterns form when prices fail to make new lows at a significant bottom area. Most of the time, the lows on the two "bottom bars" form within 2 to 5 percent of the applicable price range. "Double bottom" patterns are easily detected after the apparent formation, and can be traded with good confirmation signals. Volume may provide a good confirmation signal as the volume in the first swing would be heavier than the volume in the second swing. Volume may also be heavier on the breakout. If the breakout volume is weaker, it may be signaling a third bottom.

Trade:
A "Double bottom" can only be traded after confirmation of the pattern breakout. Confirmation of the pattern occurs when prices close above neckline. Enter a "long" trade above the high of the breakout bar from the neckline.

Target:
"Double bottom" patterns also have a good risk/reward ratio. The first target would be 100% of the swing range of the pattern. The second target would be 127% to 162% of the depth of the "double bottom" pattern.

Stop: "Double bottom" patterns do fail. This pattern failure occurs if the price closes below in the middle of the pattern for multiple bars. Trading below the bottom of the pattern could be a signal of triple bottom. Place a "stop" order below the middle of the pattern to protect the trade.





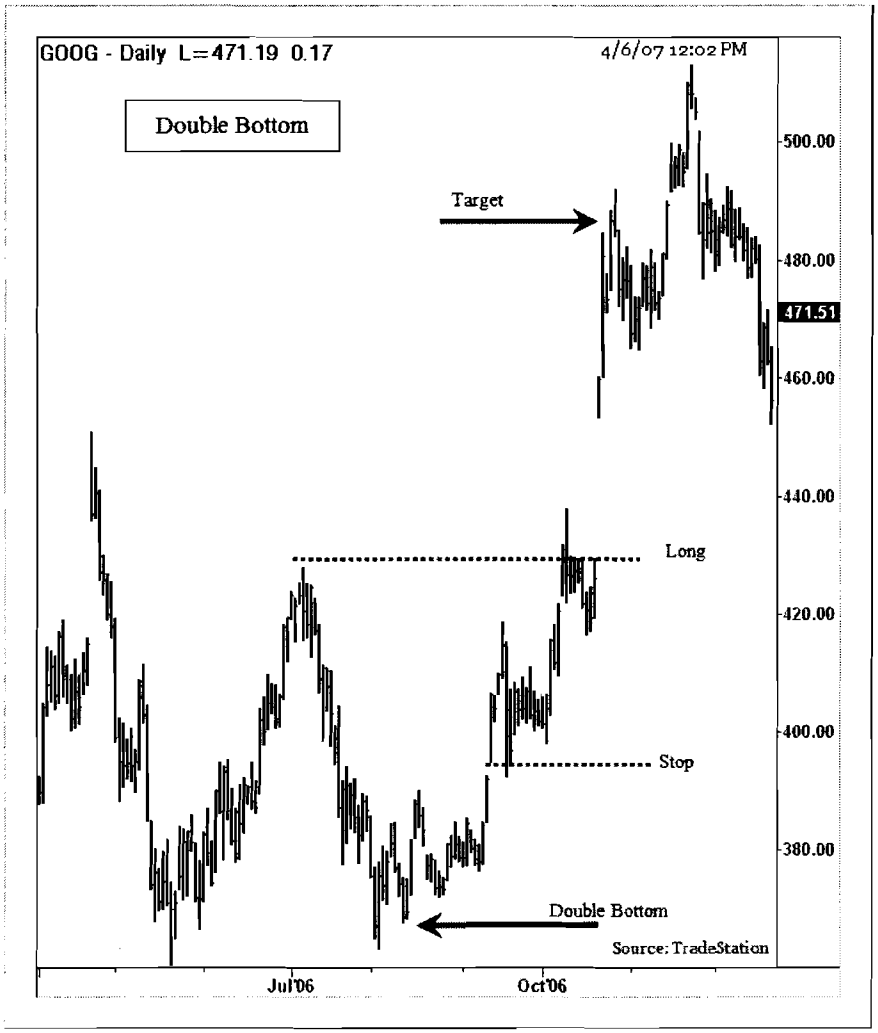
Trading Double Bottom Pattern

Trading the Double Bottom Pattern

The example above illustrates a "Double bottom" pattern formation from the Dow Emini futures (YM) chart. YM made a double bottom from June, 2006 to August, 2006 at the 10,800 level. The "Double bottom" pattern is relatively easy to trade. A "long" trade was triggered at the breakout of the swing high (at level "A" 11,500).

1. Enter a "long" trade above the high of the breakout bar at level "A" at 11,500.
2. Place a "stop" order at the middle of the channel (trading below may be "triple bottom").
3. Target the depth of the "double bottom" pattern (600 points) above the trade entry.

Trading Double Bottom Pattern



Trading the Double Bottom Pattern

The example above illustrates a "Double bottom" pattern formation from the Google (GOOG) chart. GOOG made a "Double bottom" from June 2006 to August 2006 at $370 level. The "Double bottom" patterns are relatively easy to trade. A "long" trade is triggered at the breakout of the "swing high" (at $430). The depth of the "Double bottom" pattern is $60.

1. Enter a "long" trade above the high of the breakout bar at $430 level.
2. Place a "stop" order at the middle of the channel (trading below may be "triple bottom").
3. Target the depth of the "Double bottom" pattern above the trade entry.

11.12. Triple Top Pattern

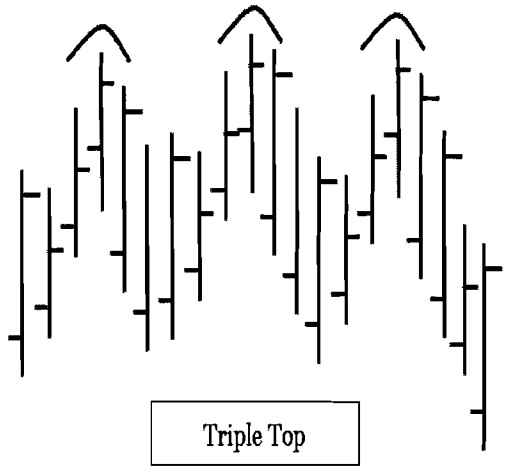
Triple Top Pattern

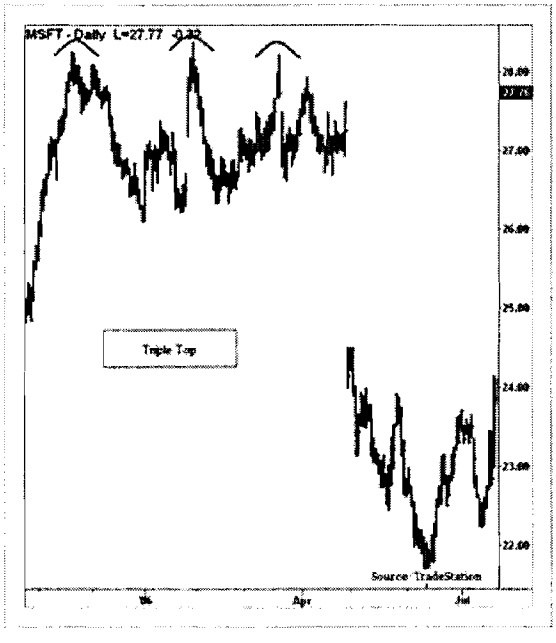
"Triple Top" patterns are multiple top patterns indicating when prices try to make new highs and fail on the last attempt. "Triple top" patterns look like "Head and Shoulders" patterns, and are moderately reliable patterns to trade. However, "Triple top or bottom" patterns do fail and failures may be probably more reliable and stronger as they trade in opposite direction. Most "Triple top" pattern lows occur within 2% to 5% of price range. "Triple tops" are relatively easy to detect and offer a good risk to reward ratio. A confirmation is needed before trades are initiated. Heavy volume is traded in the first swing up, but the remaining swings will incur with diminished volume. In addition, heavy volume is followed at the breakdown of the pattern.

Trade:
There are two types of possible trades that occur in "Triple top" patterns. An aggressive trade (short) is placed near the last attempt at the lower high of the previous two swing highs. The second trade is possible when prices close below the lower low of the previous two swings at breakdown.

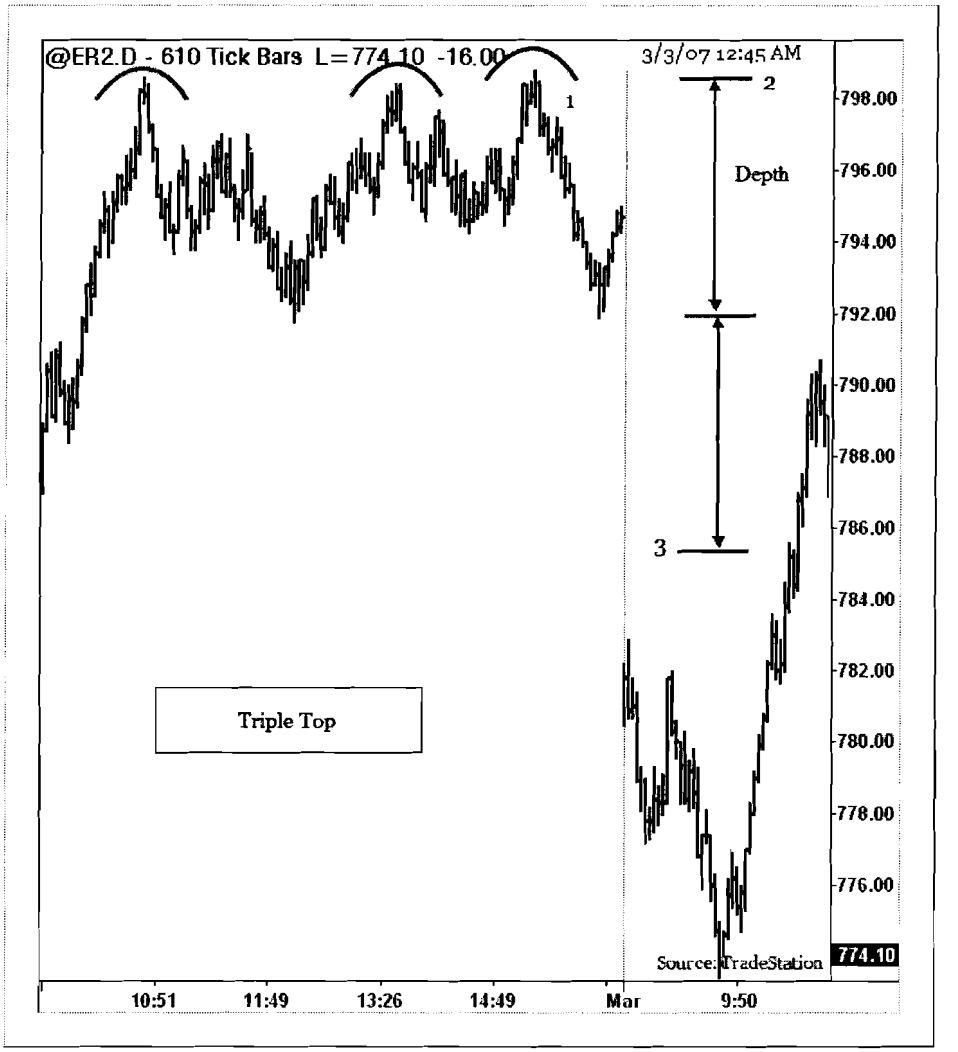
Target:
"Triple top" patterns have excellent risk/reward ratio. Measure the depth of the "Triple top" between swings and subtract the depth from breakdown level.

Stop:
"Triple top" patterns fail when prices attempt to close above the highest "swing high" of the pattern. Place a "stop" order above the "swing high" of the "triple top" to protect the trade.





Trading Triple Top Pattern

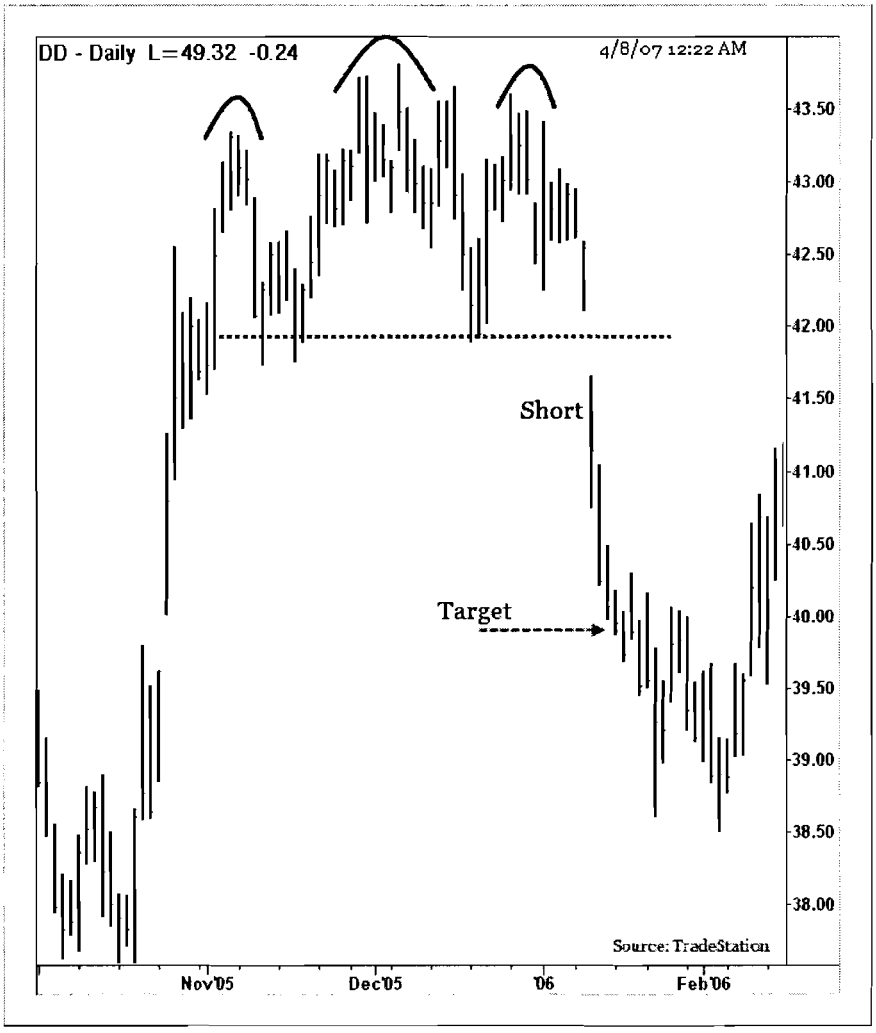


Trading Triple Top Pattern

The example above illustrates a "Triple top" pattern from an intraday Russell Emini futures chart. On February 28, 2007, Russell made a significant "Triple top" at the 798 level and was hesitant to cross at the 798 level. On its third failed attempt to close above 798 failure, the pattern suggested a potential short entry.

1. After a failed third top, enter a "short" trade one-tick below the low of previous bar at 796.
2. Place a "stop" order above the "swing high" at 798.5.
3. Targets are set at pattern depth from the "swing low" of the "Triple top" pattern at 786.

Trading Triple Top Pattern



Trading Triple Top Pattern

The example above illustrates a "Triple top" pattern from Dupont's daily chart. From November, 2005 to January, 2006, Dupont attempted to cross above $43.5 and traded in a price range between $42 and $43.5. In December 2005, Dupont made a final failed attempt to cross the $43.5 level and closed below $42 on its reversal. Closing below the $42 level gave a short trading opportunity.

1. Enter a "short" trade below the low of the breakdown bar.
2. Place a "stop" order above the last "swing high."
3. Target the depth of the "triple top" pattern from the price entry.

11.13. Triple Bottom Pattern

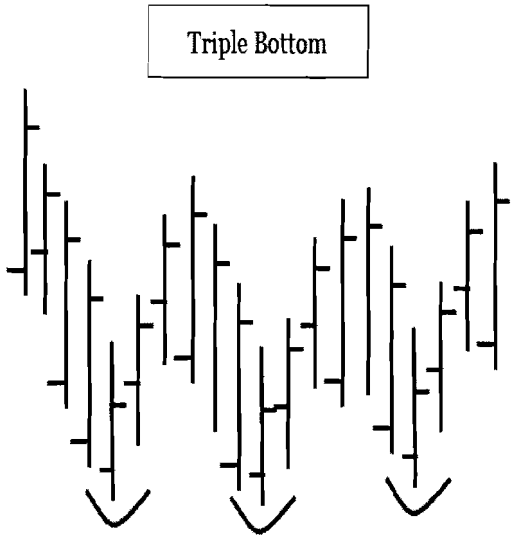
Triple Bottom Pattern

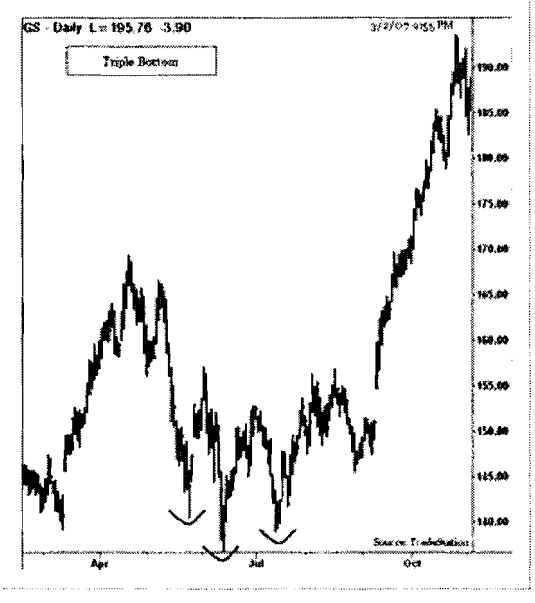
The "Triple Bottom" pattern is a reversal pattern that occurs at major market bottoms. The "Triple bottom" pattern is formed when prices fail to make new lows on three different occasions. Most "Triple bottom" pattern lows occur within 2% to 5% of price range. "Triple bottoms" are relatively easy to detect and offer good risk to reward ratio. A confirmation is needed before trades are initiated. Heavy volume is traded in the first swing down but the rest of the swings will have a diminished volume followed by heavy volume at breakouts.

Trade:
The "Triple bottom" patterns offer excellent risk and reward ratios. There are two types of possible trades. The first trade is an aggressive type to buy near the higher of the first and second swing lows and protect the trade with the "lowest low." The second type of trade is triggered after a confirmation of the pattern. This confirmation of pattern occurs when the higher of two prior swings is traded. Enter a "long" trade above the high of the breakout bar.

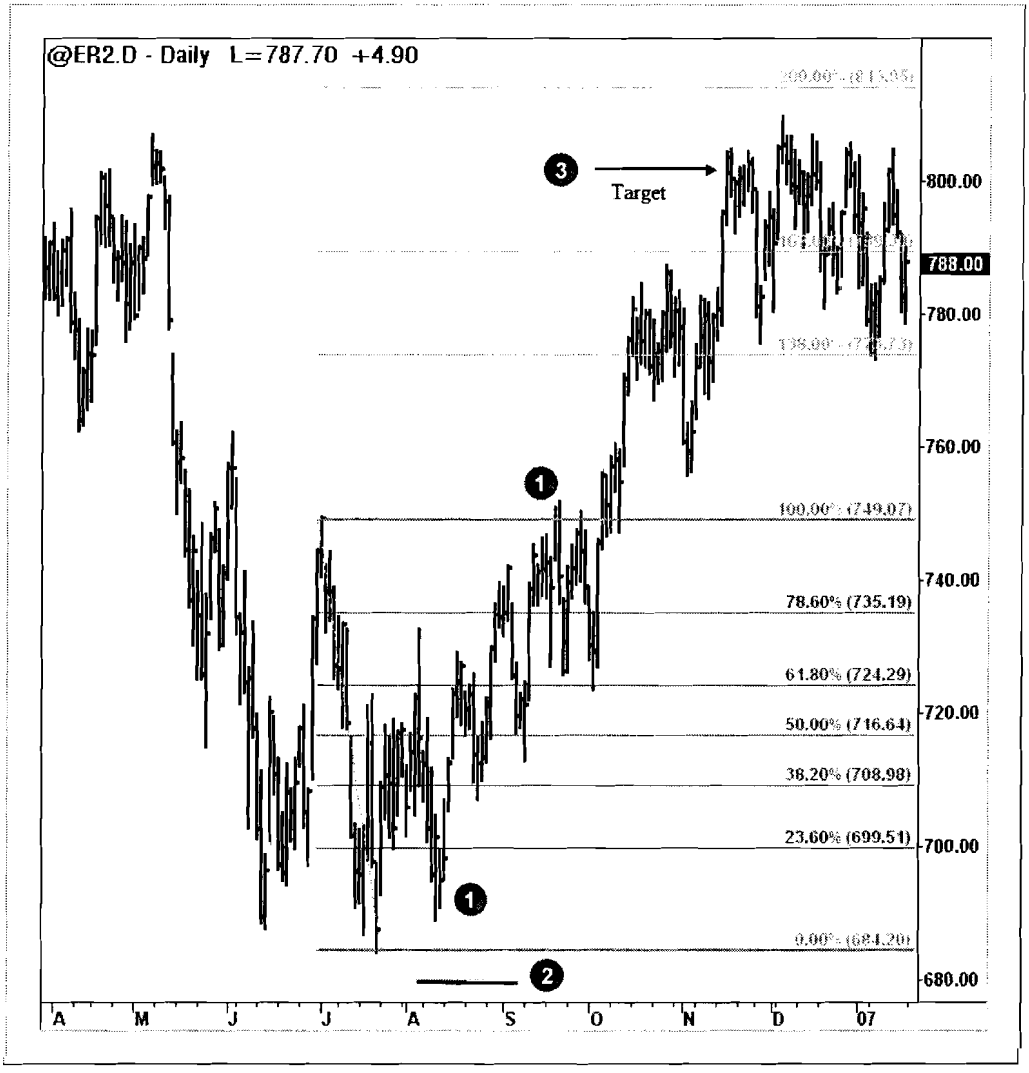
Target:
In both trading cases above, targets are set from 62% to 100% of the depth of the three swings.

Stop:
Protect the trades by placing a "stop" order below the "lowest low" of all three swing lows.





Trading Triple Bottom Pattern

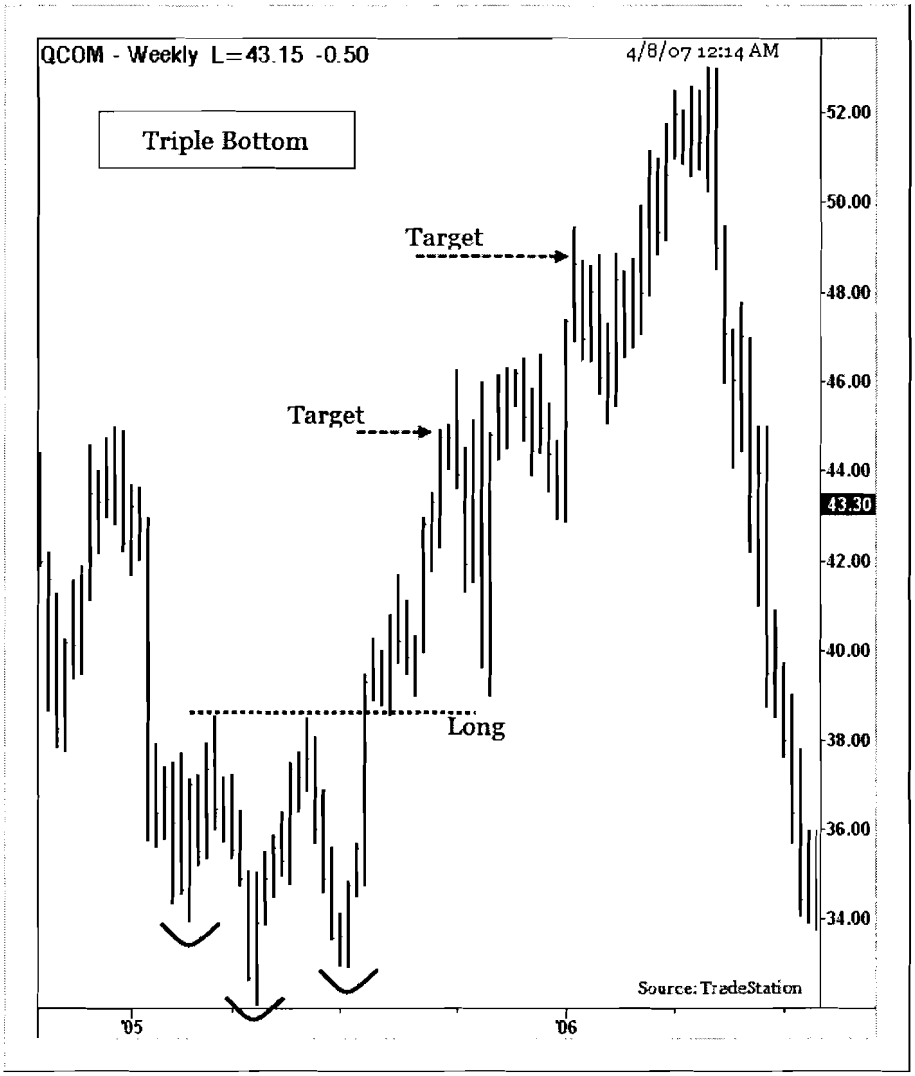


Trading Triple Bottom Pattern

The example above shows a "Triple bottom" pattern from the Russell 2000 daily chart.

1. Enter first "long" trade above the high of a reversal bar after three "swing lows" at 685. Enter another "long" trade on the breakout of the "swing high" of the "Triple bottom" pattern (at 749).
2. Protect the trade by placing a "stop" below the "lowest" of three "swing lows."
3. The targets are set from 62% to 100% of the depth of "Triple bottom" pattern above the breakout level.

Trading Triple Bottom Pattern



Trading Triple Bottom Pattern

The chart above shows a "Triple bottom" pattern from the Qualcomm's (QCOM) weekly chart. From January 2005 to June 2005, Qualcomm attempted to close below the $33 level three times while attempting to make a "Triple bottom" pattern. After the third failed attempt, QCOM rallied above the neckline of the "Triple bottom" pattern to provide an opportunity to trade long.

1. Enter a "long" trade above the high of the breakout bar at $39.
2. Place a "stop" order below the low of the recent "swing low" at $34.
3. Place a "target" at the depth ($5) of the "Triple bottom" pattern ($5) above the "neckline".

Chapter 12: Exotic Patterns

12.1. Dragon Pattern

Dragon Pattern

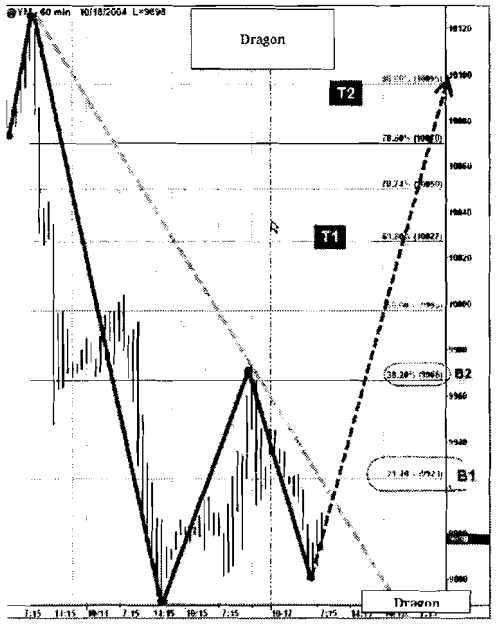
The "Dragon" pattern is similar to the "W" pattern or the "Double Bottom" pattern with few different trading rules and different targets. "Inverse Dragon" patterns are similar to "M" pattern. "Dragon" patterns usually form at market bottoms. Dragon patterns work in all time-frames and in all market instruments. Like most "Double bottom" patterns, "Dragon" patterns present excellent trading opportunities with low risk to reward ratios.

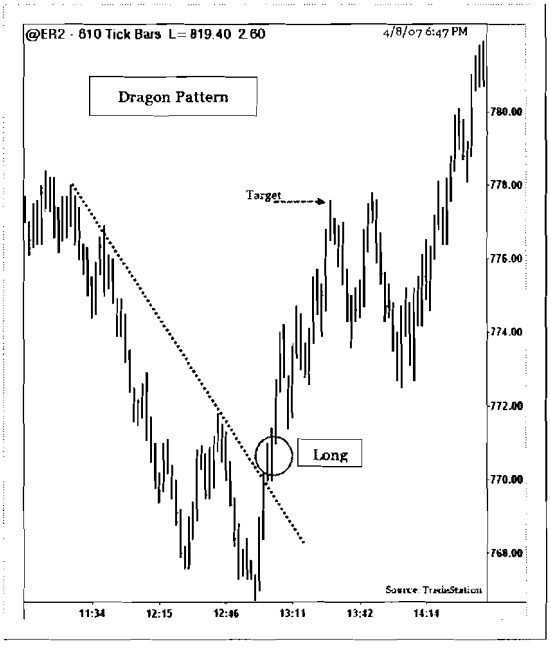
The "Drgaon" patterns start with a "Head" formation and price declines from the head level form two legs of the "Dragon". These two legs in a "Dragon" pattern usually form within 5% to 10% of the price difference. The second leg has a strong indication of reversal as it posts a key reversal bar, or a "divergence" in any oscillator indicators. The price rise in the second leg is usually followed by a spike in the volume. A trend line is drawn connecting the head of the "Dragon" to the hump. When the price closes above the trend line and confirmed by price action or divergence in any oscillator, it signals a reversal. The second confirmation of "Dragon" occurs when the price closes above the hump, 38% to 50% of the range from head to the low of the first leg.

Trade: Aggressive traders enter a "long" trade when the price closes above the trend line. A better trade entry may be signaled when the price closes above the hump level. Enter a "long" trade few ticks above the hump level.

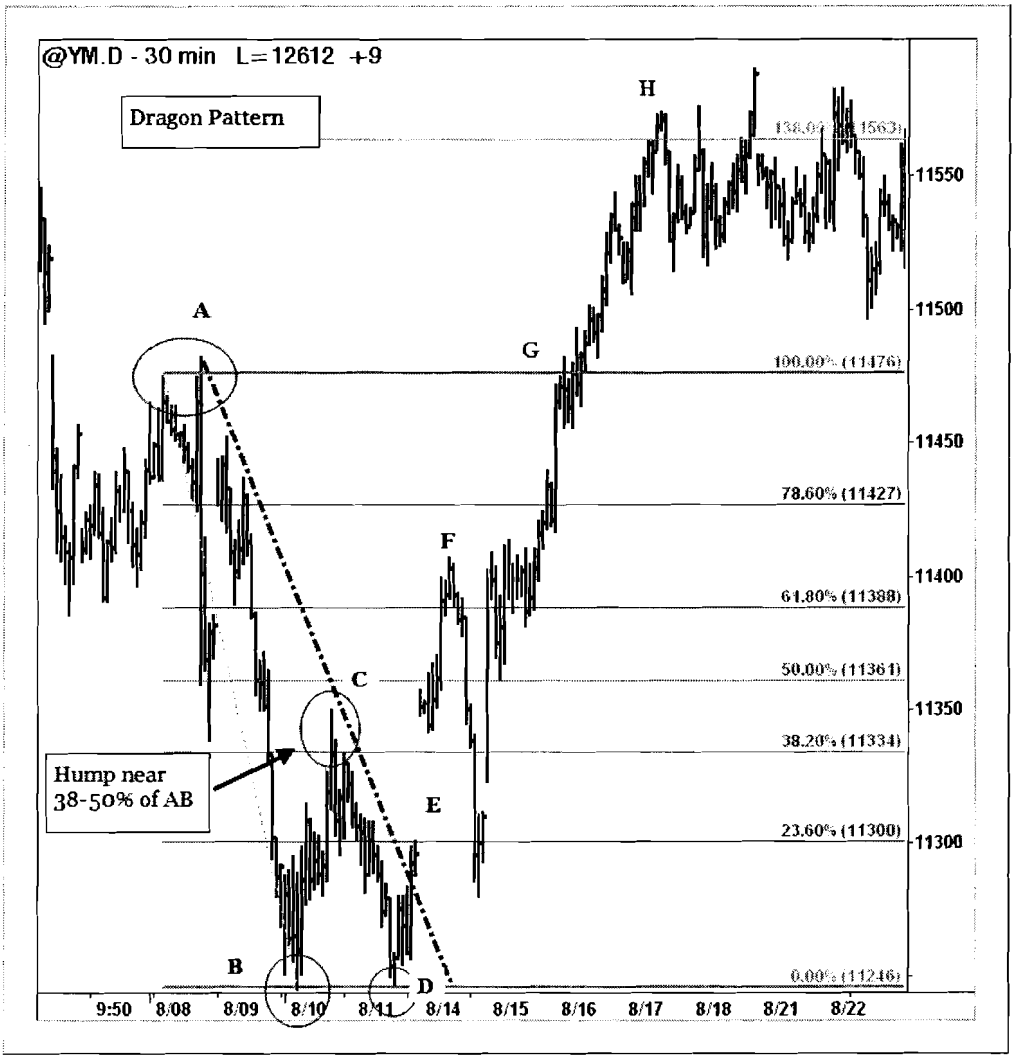
Target: Targets are usually at 127% of the second leg range and another target is set at near the "head" level.

Stop: Place a "stop" order below the "lowest low" of the two legs.





Trading Dragon Pattern

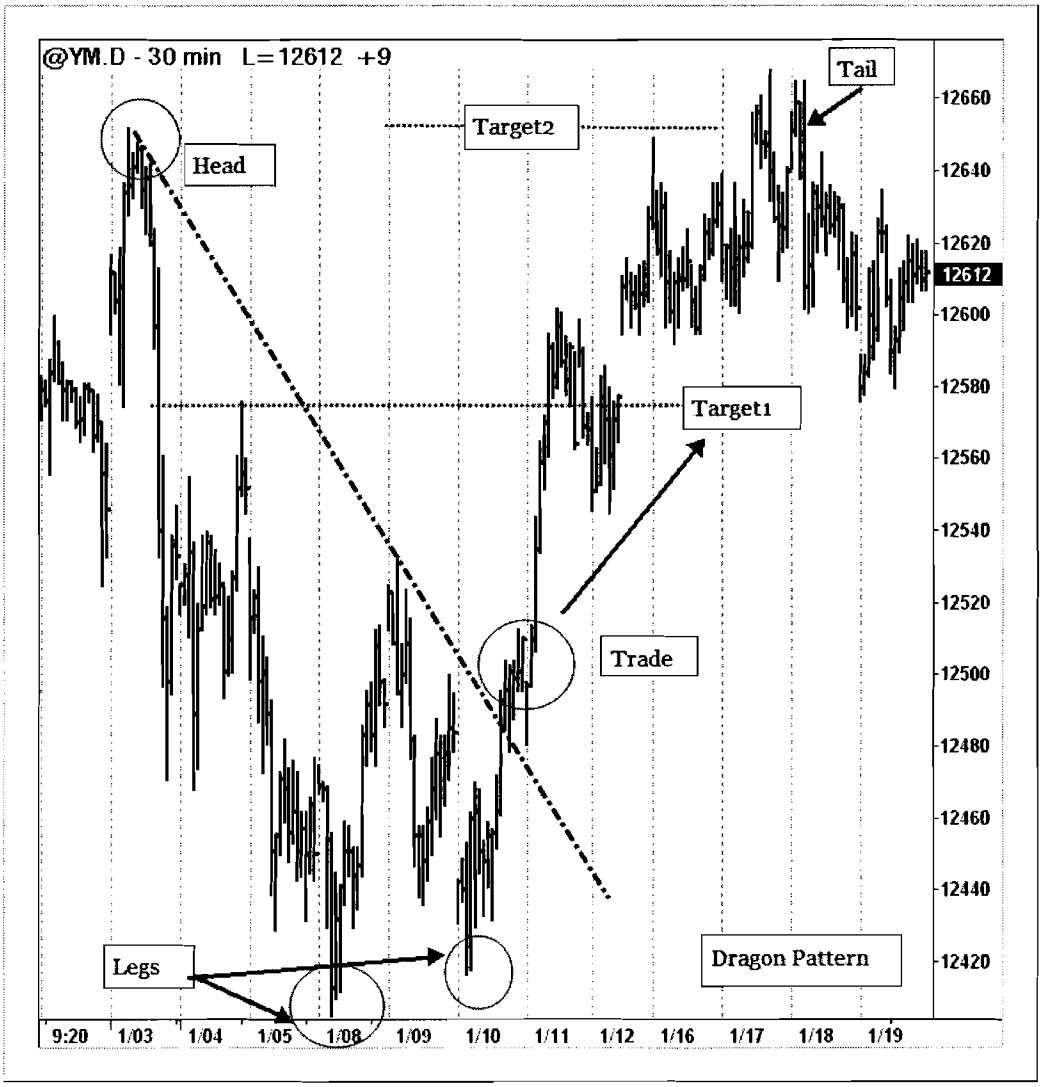


Trading Dragon Pattern

- Head
- Formation of "first leg."
- Hump (must be 0.38 to 0.5 of AB).
- "Second leg" (can be 0.618 to 1.27 of AB).
- Trend line "breakout" (Long Trigger).
- First "target" at 1.27 of CD.
- Second "target" at 0.886 to 1.0 of BC.
- Third "target" at 1.38 of AB.

STOP: Place a stop few ticks below the lowest low of two legs.

Trading Dragon Pattern

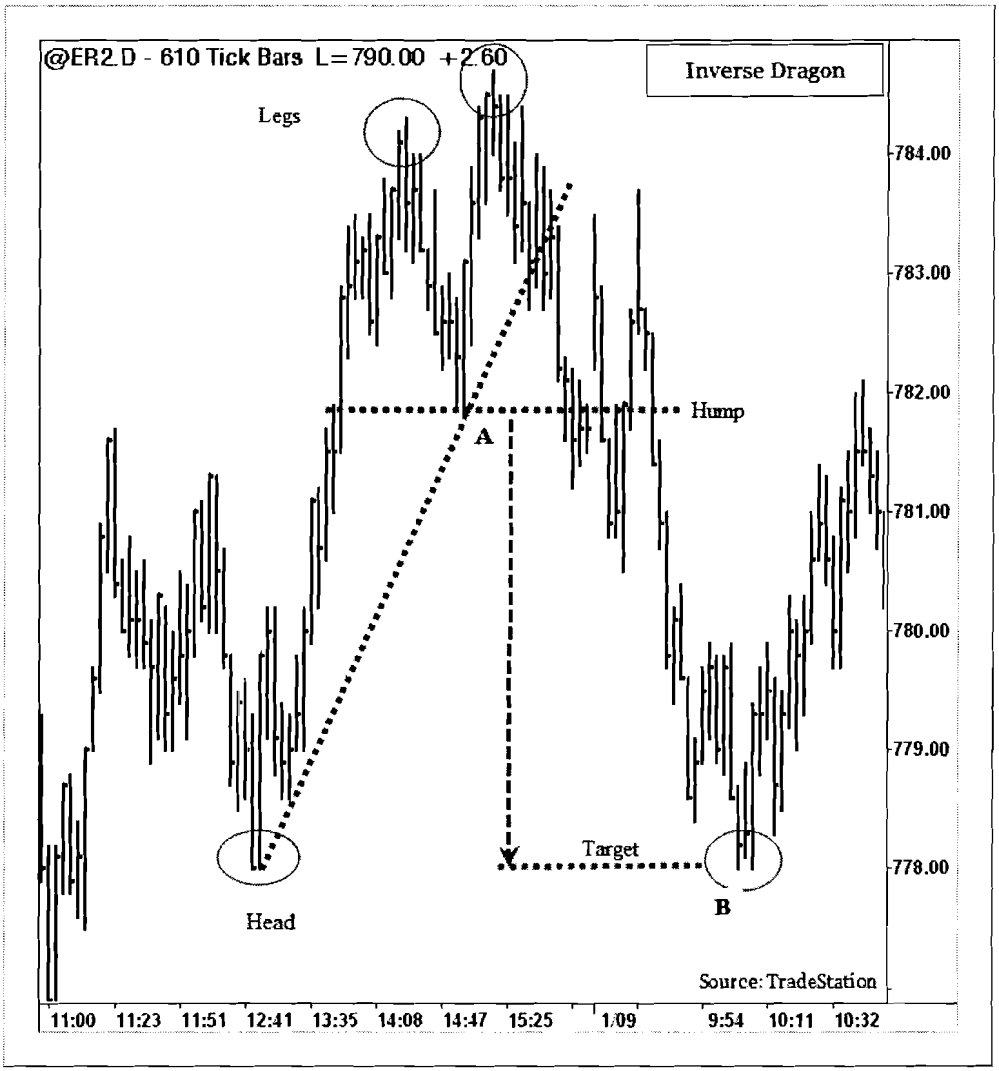


Trading Dragon Pattern

The example above shows a "Dragon" pattern formation from the Dow Emini futures 30 minute chart. On January 3, 2007, Dow futures formed the head of the "Dragon." Prices declined until January 8th in the first leg formation. On January 8th, prices tried to recover as they rallied to 12520. A trend line is drawn connecting the "top" of the "head" and "top" of the first leg. On January 10th, the second leg was formed as prices retraced from the hump area to 12420. A confirmation of "Dragon" is first signaled when prices closed above the trend line at 12500.

1. Enter a "long" trade at 12,520 (close above the high of the breakout bar).
2. Target the first "swing high" prior to leg (1) at 12,570 and "head" area at 12,640.
3. Place a "stop" order below the lowest low of the two legs at 12,410.

Trading Inverse Dragon Pattern

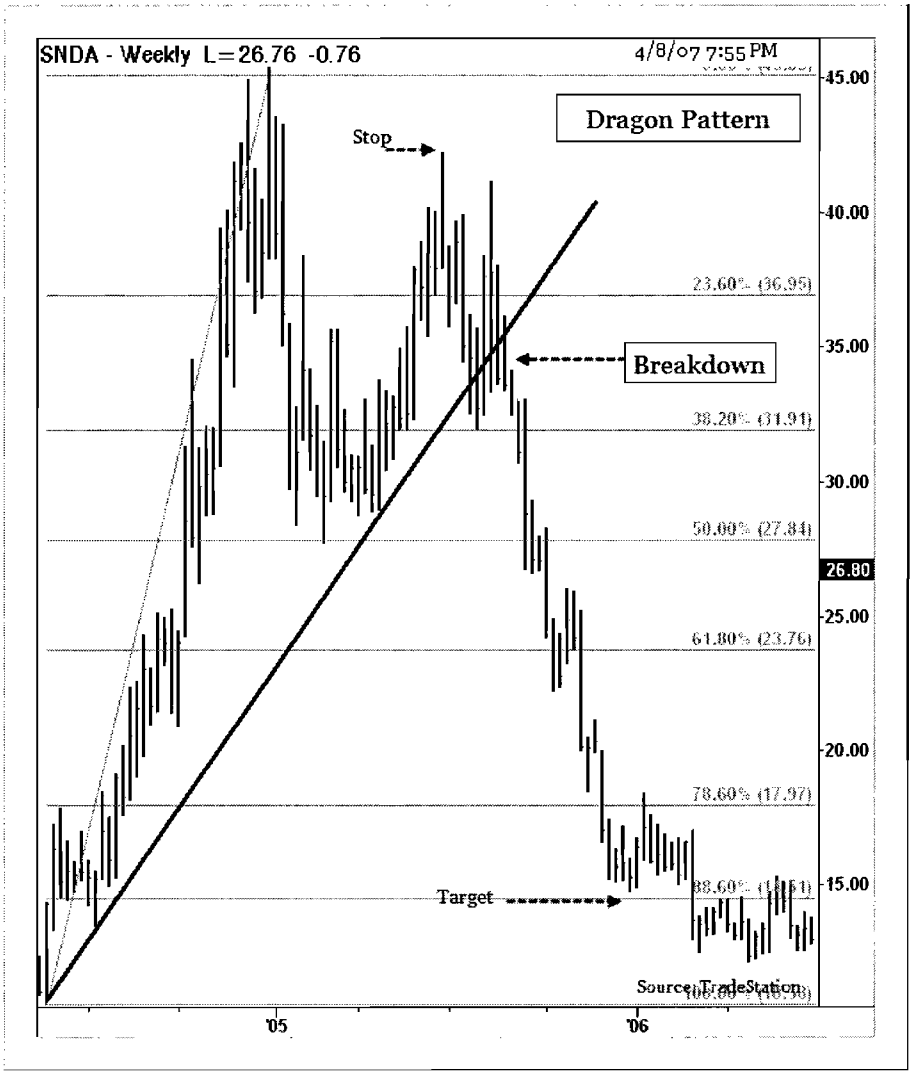


Trading Inverse Dragon Pattern

The "Inverse Dragon" is an upside down "Dragon" pattern and its trading rules are similar to "Dragon" rules. The "Inverse Dragon" is a rare, but a very reliable pattern. The "Dragon" pattern starts with a "head," "hump" and two "legs" (inverse). The hump area is usually at 38% to 50% of the range between the "head" and the first "leg." A "close" below the trend line triggers the first "short" trade. A "close" below the "hump" line to trigger another "short" trade.

1. Enter a "short" trade below the trend line.
2. Target the "swing low" prior to the first "leg."
3. Place a "stop" order above the highest high of the two legs.

Trading Inverse Dragon Pattern



Trading Inverse Dragon Pattern

Inverse Dragon is an upside down "Dragon" pattern with trading rules similar to "Dragon" rules. The hump area is usually formed at 38% to 50% of the range between the "head" and first "leg." A close below the trend line triggers the first "short" trade. A "close" below the "hump" line confirms the "Dragon" and signals another short trade.

1. Enter a "short" trade below the trend line.
2. Target the "swing low" prior to the first leg.
3. Place a "stop" order above the "high" of the second leg.

12.2. Sea Horse Pattern

Sea Horse Pattern

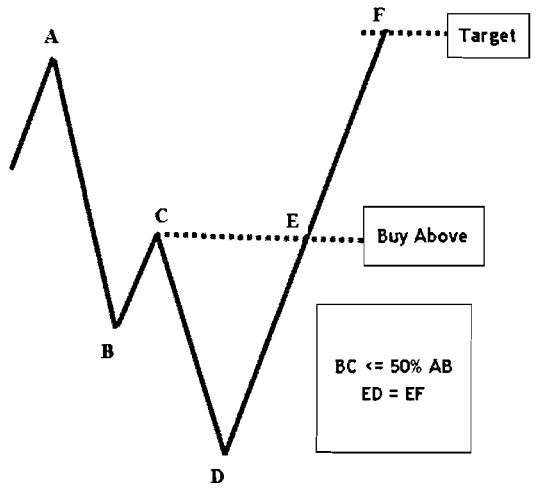
The Sea Horse pattern is a variation of the ABC pattern which I discovered in 2005. It is related to the ABC pattern theory, and is quite reliable in trending markets. The "Sea Horse" pattern may be rare in daily or weekly charts, but it occurs frequently during intra-day trading. The primary difference between the ABC pattern and "Sea Horse" pattern is its trade setup, and the retracement ratios along with the angle of descent. The ABC pattern trade triggers after ABC pattern completion; whereas, in a "Sea Horse" pattern, the trade occurs after a full reversal and trend confirmation.

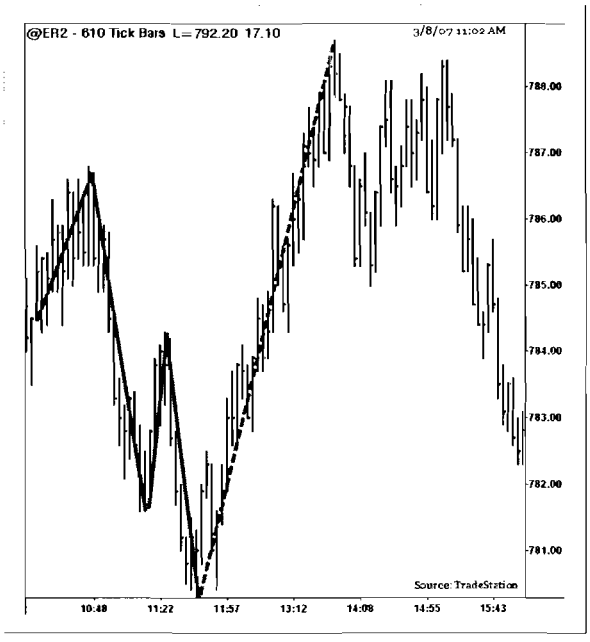
In an ABC pattern, the BC retracement occurs at the 0.618 to 0.786 range; whereas, in a "Sea Horse" pattern, the retracement occurs from 38% to 50% of the prior swing. In "Sea Horse" pattern, the angle of descent is much faster than ABC pattern, and the retracement will be at about 38% to 50% of the entire range. The trade-action point in the ABC pattern is after completion of the pattern, and in "Sea Horse" pattern, the trade-action point is after the price reversal and trading above the retracement at C level.

Trade: The "Sea Horse" pattern trade occurs after its price reverses, and trades above the retracement level. Wait for the prices to close above the retracement level at C, and enter a "long" trade above the high of the breakout bar.

Stop: Place a "stop" order below the "swing low" prior to the retracement level.

Target: Place a "target" (at F) 100% of the range from the retracement level to the swing low.





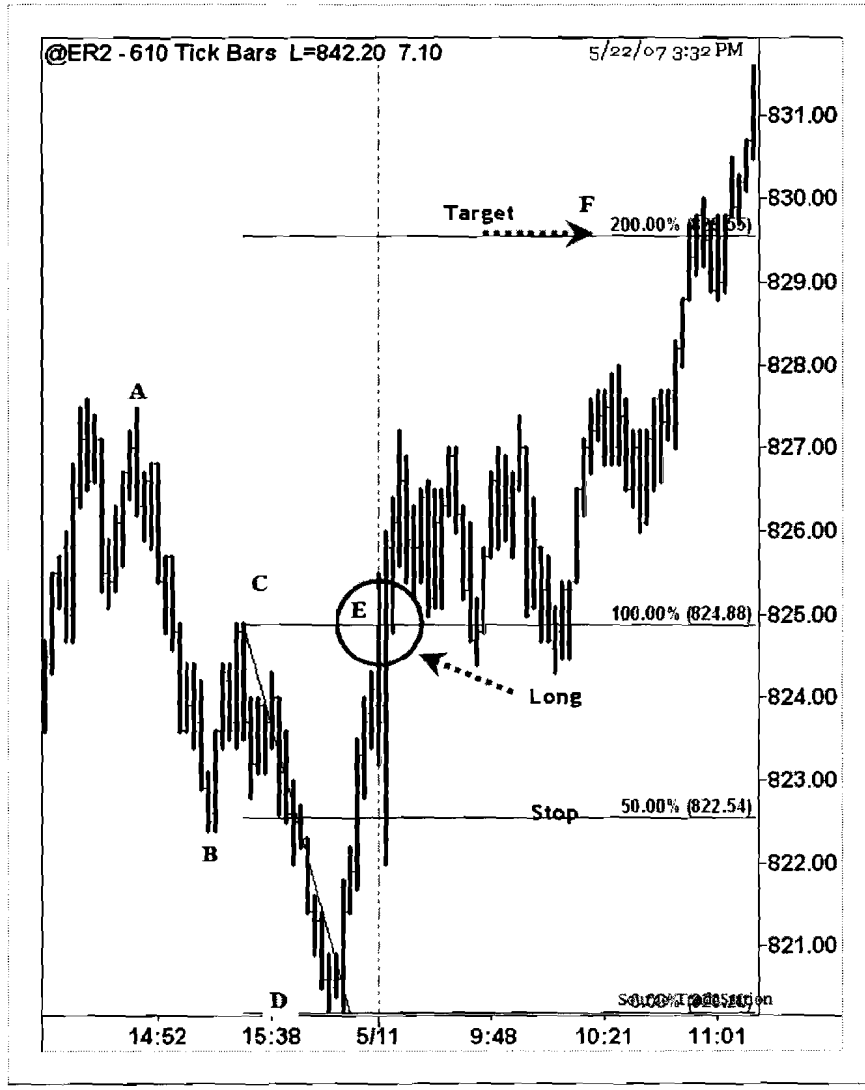
Trading Sea Horse Pattern

Trading Sea Horse Pattern

The example above shows a "Sea Horse" pattern from the Wynn resorts (WYNN) daily chart. WYNN traded from a high of $58 to $46 and formed the first phase of the "Sea Horse" pattern. Then it retraced to $52 before declining to $42 to complete the pattern. In November 2005, WYNN traded above the "Sea Horse" retracement level at C (at $51.50) to give a long trading opportunity.

1. Enter a "long" trade above the C level (at $52).
2. Place a "stop" order below the low of the retracement at B level ($46).
3. Place a "target" at 100% of range (from C to D) at E level to $60.75.

Trading Sea Horse Pattern



Trading Sea Horse Pattern

The example above shows a "Sea Horse" pattern from the Russell Emini (ER2) 610 tick chart. On May 10, 2007, ER2 formed a "Sea Horse" pattern, and traded from 827 to 820. Later that day, ER2 reversed its downtrend and closed above the retracement C level (at 825). The BC range was 50% of AB swing.

1. Enter a "long" trade above the high of the bar at E level (at 825.5).
2. Place a "stop" order below the low of B level (at 822).
3. Place a "target" at 100% of the range (from C to D) 4.5 points from E level to 829.

12.3. Scallops Pattern

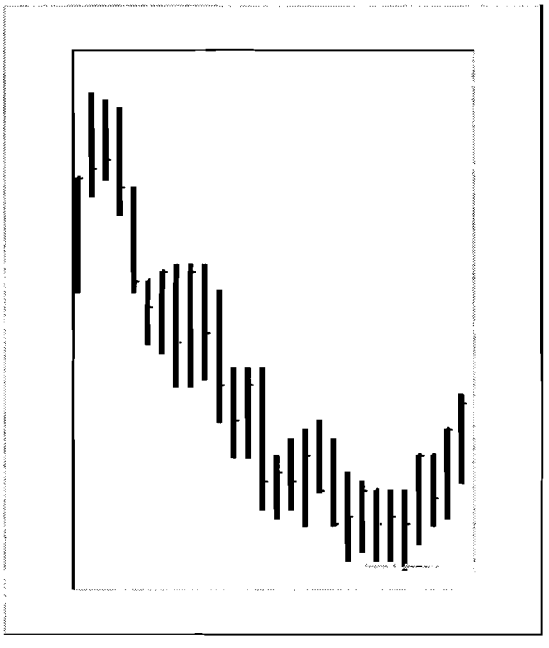
Scallops Pattern

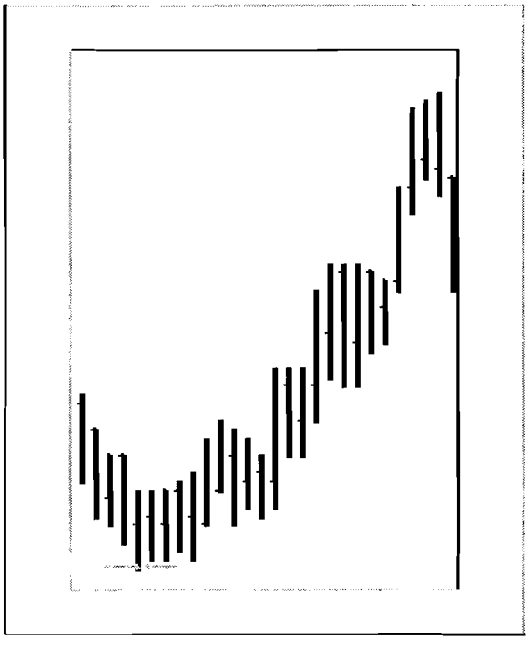
"Scallops" are J-shaped patterns that form in ascending and descending markets. In ascending "Scallop" (Bullish) formations, the pattern resembles a "J" letter and has a rounded bottom with a steep ascent. In descending "Scallop" (Bearish) formations, the pattern looks like a "Mirror Image of J." Usually the volume between the top peak and the bottom "J" peak resembles a "U" shape formation. In ascending and descending "Scallop" formations, the higher "Scallop" size or lower "Scallop" size becomes smaller as they progress. "Scallop" patterns are relatively easy patterns to trade and have a moderate success rate compared to the "flags" or other continuation patterns.

Trade: Descending Scallop patterns are visible once the bottom part is made and the price starts to rise. Also, descending "Scallops" are potential short trades once prices trade below the low of the "curved bottom." In ascending "Scallops," after the first "J" Scallop formation, a retracement is needed for another "J" Scallop. Depending on the market strengths, the retracement is from 38% to 62%, and hence the failure rate in ascending patterns is relatively higher than descending "Scallops."

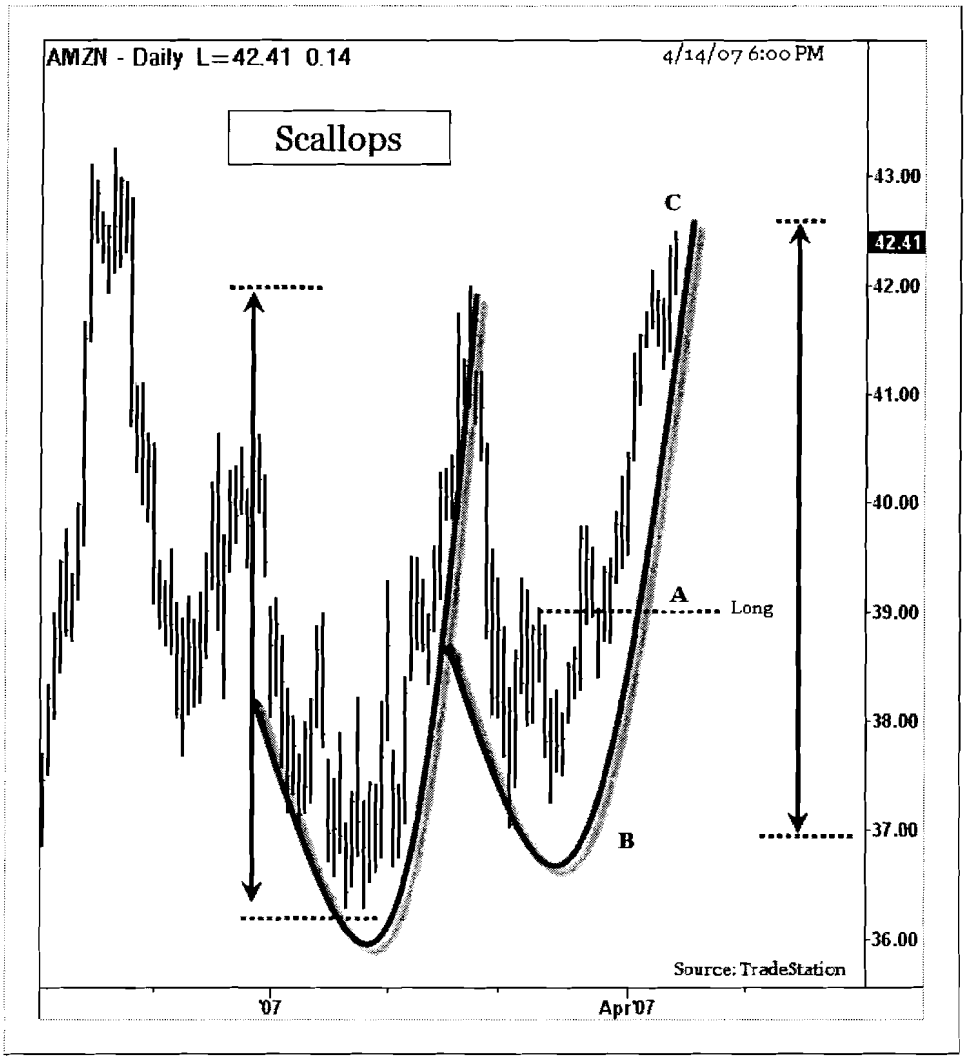
Stop: In descending "Scallops," the trade is initiated below the low of the pattern. If the prices rise back above the right side of the "J" peak, then the pattern is considered as a failure. In ascending patterns, a "stop" is placed below the low of the "J" pattern.

Target: Targets are usually at the height of the "J" pattern from trade entry. For ascending patterns, the height of the "J" shape is added to the entry. In descending patterns, the height of the "J" shape is subtracted form the entry.





Trading Scallops (Ascending) Pattern

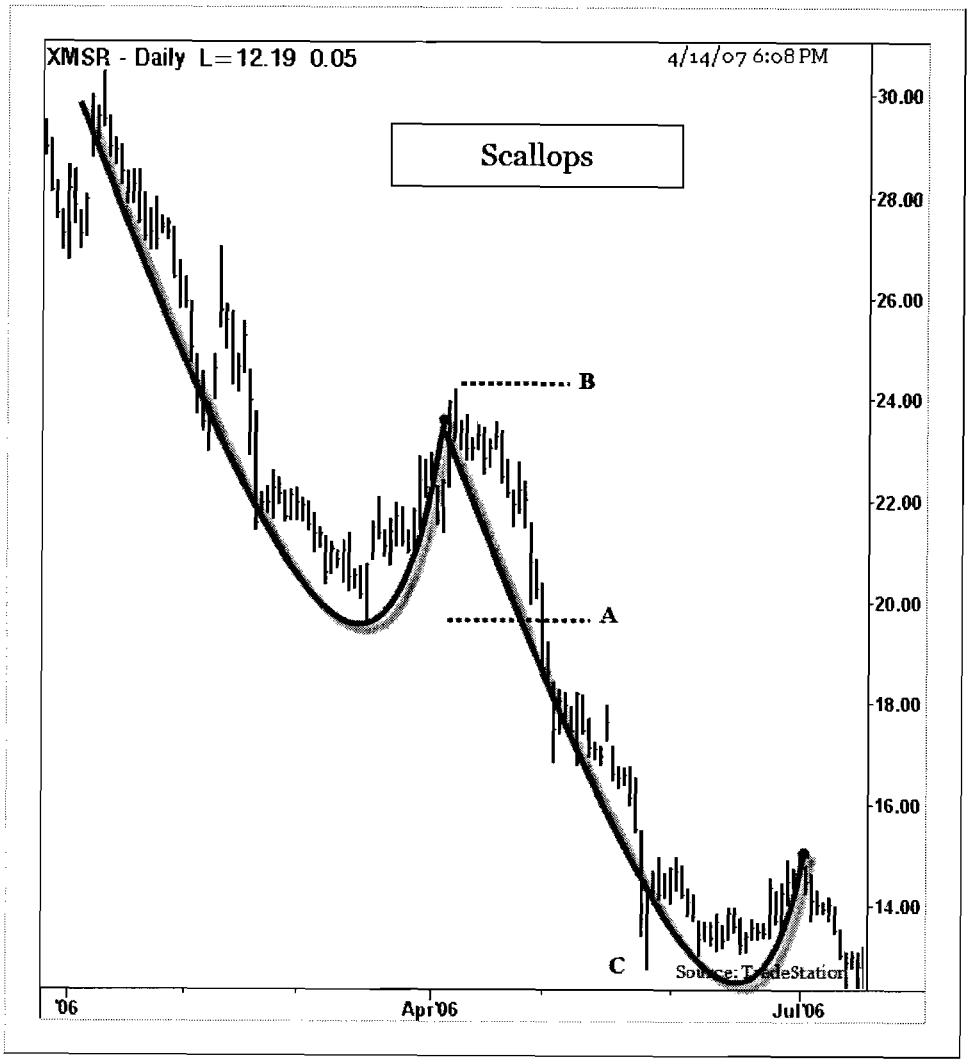


Trading Ascending Scallops Pattern

The example above illustrates an "Ascending Scallop" pattern from Amazon's daily chart. Amazon formed its first ascending "Scallop" from $36 to $42. A retracement is needed for this pattern to trade another upside "Scallop" pattern. After a steep decline, Amazon formed a round bottom at $37 to $39. Once the pattern started to breakout of the round bottom, it gave an opportunity to enter a "long" trade.

1. Enter a "long" trade above the right side hump at level A ($39).
2. Place a "stop" order below the low of the second "Scallop" bottom ($37).
3. Targets are placed at the height of the first "Scallop" from level B ($42).

Trading Scallops (Descending) Pattern



Trading Descending Scallop Pattern

The example above illustrates a "Descending Scallop" pattern formation from the XM Satellite (XMSR) daily chart. XMSR formed its first descending "Scallop" in March 2006 as it declined from the peak of $30.50 to a low of $20. In April 2006, XMSR retraced above $24 and started to decline to form another descending "Scallop." The first "Scallop'" height was $10 and the low was at $20.

1. Enter a "short" trade below the low of the Scallop at $20 (level A).
2. Place a "stop" order above the high of the "Inverse J" at $24 (level B).
3. Place a "target" at the height of the "J" shape from level B to $14 (level C).

Chapter 13: Event Patterns

13.1. Gaps

Gaps

Gaps are formed when a price imbalance occurs in its buy and sell orders. Most gaps are usually driven by news or economic reports, earnings reports or up/downgrades. The daily gaps are defined in stocks when the day's opening price (begins at 9:30 am EST) is either higher or lower than the prior day's closing price at 4pm EST. Most stocks and index futures gap about 20% to 25% of the time during the year.

Although "Gap" trading is very profitable, trading gaps is relatively difficult for many traders. Many traders avoid gap trading as "Gaps" are usually manipulated by professional portfolio traders and large institutional traders. However, experienced traders employ some successful strategies to trade gaps by a popular method of fading them. Traders watch pivots, support and resistance areas within the gaps and fade them.

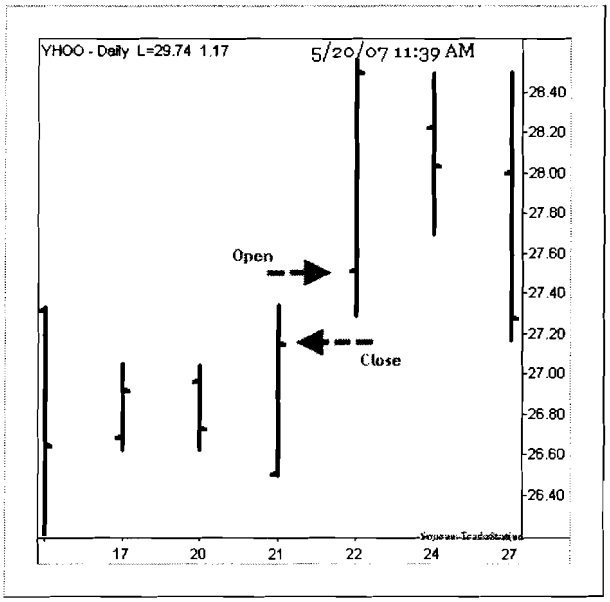
Additionally, "Gaps" form during intra-day trading (on time-based charts) and may offer some potential clues to price-action. During intra-day trading, gaps formed in higher time frame charts such as 30 minute or 60 minute offer excellent trading opportunities.

Gaps are primarily grouped as: Common, Breakaway, Continuation and Exhaustion. Each has its own way to trade, but the most profitable and relatively low-risk "Gaps" are Breakaway and Exhaustion gaps. Exhaustion gaps present very attractive gains and Breakaway gaps offer low-risk setups. Breakaway gaps are also excellent in finding the breakout candidates for long-term.

Here are some basic rules to remember when trading Gaps.

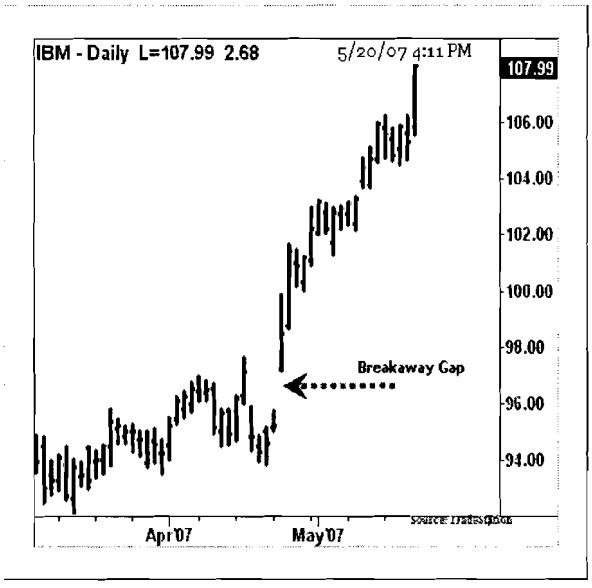
1. Trading "Gaps" is an art and is a specialty by itself.
2. Gap trading methods offer reasonable success, but it does present more risk than other trading methods. However, gap setups such as breakaway, exhaustion and island reversals offer excellent rewards for the risk involved.
3. Stocks which involve gap trading must have a consistent trading range. For example, a stock priced at $20 must have at least a $0.50 average trading range (ATR), and a stock priced at $50 must have at least a $1 average trading range. Furthermore, a stock price of $100 must have at least $2 average trading range.
4. To consider an upside breakaway gap, the stock must be closing lower at least two or three days prior to the gap formation.
5. Gaps below the markets act as support and above the markets act as resistance.
6. In most cases, index futures' opening gaps tend to fill during the same trading day.
7. Common gap trading should be avoided by most traders.
8. During Gap trading, protect your trades using trail stops.
9. A valid breakaway gap almost never gets filled. Hence, all "Gaps" get filled is only partially true.
10. If a daily stock gap is 2.5 times the 10-day ATR, ignore the trade until at least the following day.

Gap Types



Common Gap

Common gaps form more often in quiet and trend less markets with a small increase in volume. Common Gaps occur more often than other Gap forms. These Gaps should be avoided by most traders if the gap range is very small. Some experienced traders may trade common Gaps with quick entry and exit rules. Trading against (fading) the common gap is the only way to profit from common gap patterns. These trades should be quick as an entry of "short" may be placed for an upside gap, as the prices reach new highs. Place a stop above the new high, and place targets at the lower-end of the gap range. For a downside gap, wait for prices making new lows and enter a "long" trade. Place a "stop" below the recent low, and place a target near the high of the gap range.



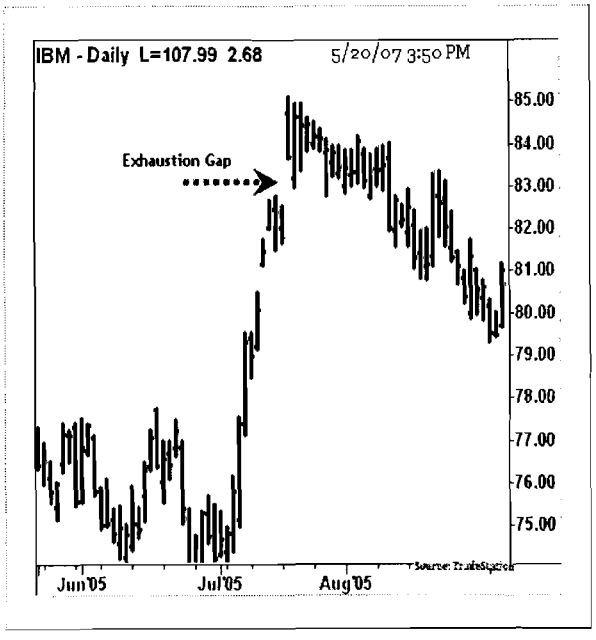
Breakaway Gap

Breakaway gaps are most reliable and are easy to visually detect. Breakaway gaps occur when prices rise out of a congestion zones or long base trading areas. They usually have heavy volume on the breakout. These gaps do not close quickly as they initiate a trend from congestion zone and stay in the trend for a long time before a reversal occurs. From the congestion zone breakout, prices make higher highs for a few bars, usually with gaps in between them, and for breakdowns prices they make lower-lows for a few bars. Breakaway Gaps present an excellent trading opportunity. Enter at the beginning of the trend in a breakaway gap and place a "stop" order below the low of the bar prior to the gap. Targets usually set a previous major swing high. Close the trade after 3 to 4 days of upside movement.

Gap Types

Continuation Gap

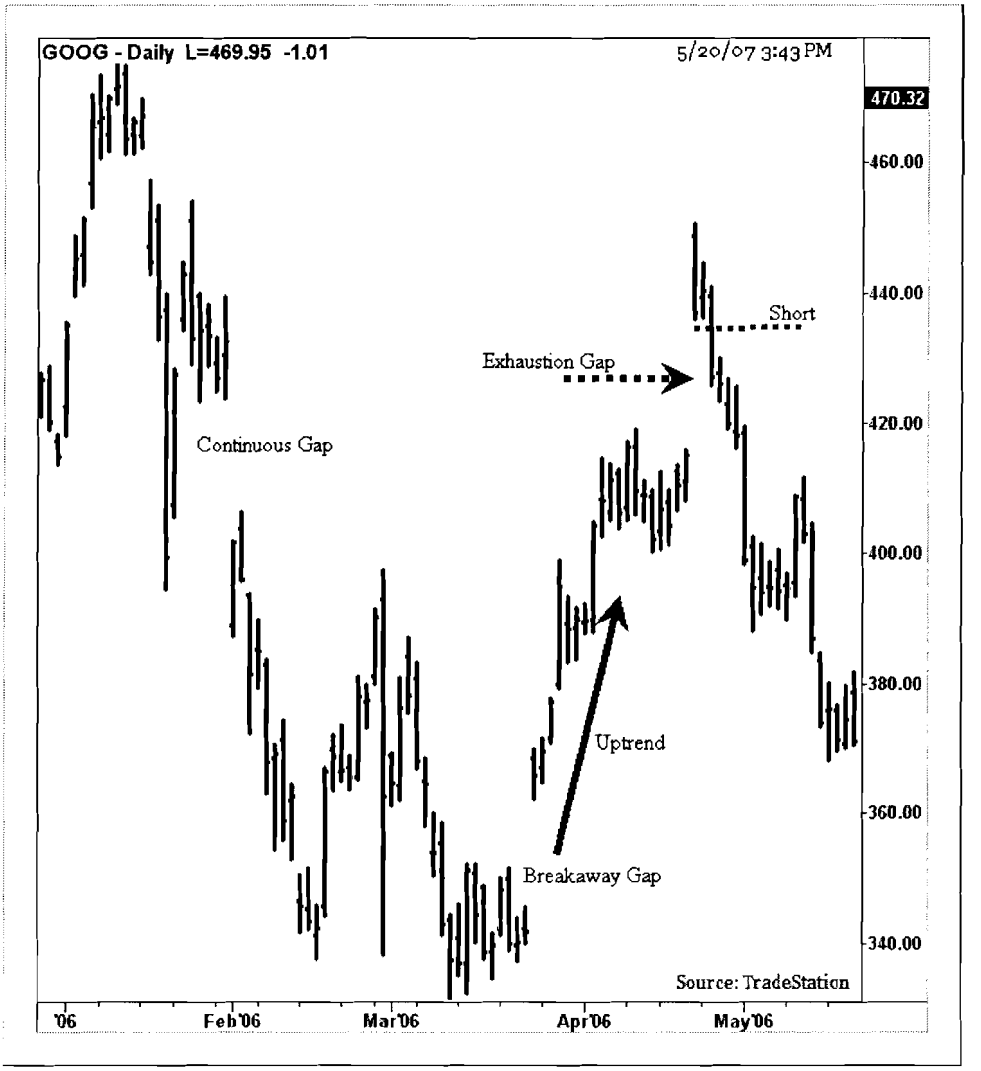
Most daily gaps tend to fill during the following few weeks. In the case of Continuation gaps, prices make new highs, or new lows, without filling the gap for extended periods of time. Continuation Gaps are signaling a continuation of an existing trend. The Breakaway gap forms at the start of a trend, while a Continuation gap forms in the middle of trend. Moreover, the volume during the Continuous gaps is heavy. Prices should make new highs or new lows immediately after the gap to "continue" the prior trend. Trading Continuous gaps could be relatively easy as the trend direction is clearly established prior to the gap



Exhaustion Gap

An Exhaustion gap occurs near the end of the trend and is not followed by new highs or new lows after the gap bar. Exhaustion gaps are great trading opportunities for reversal signals, as markets tend to fall or rise violently after the gap formation. These gaps can be easily detected as the prices reverse quickly after a gap and prices attempt to close below the gap. After an Exhaustion gap, enter a "short" trade below the low of the gap bar, and place a "stop" above the swing high of the pattern. Exhaustion gaps result in extensive sell- offs from the prior uptrend. Place targets near the swing lows prior to the Exhaustion gap trend rally.

Trading Exhaustion Gap



Trading Exhaustion Gap

The example above illustrates an "Exhaustion gap" setup from the Google's (GOOG) daily chart. A series of other Gaps are also shown in the example above. From April to May 2006, GOOG expanded making higher highs and traded from $340 to $450. In the middle of April 2006, GOOG released its earnings. Subsequently, GOOG gapped (exhaustion) open from $415 to $435 and traded as high as $450. After a few days from the earnings report release, GOOG failed to continue its higher closes and traded below the low of the gap bar at $435 to confirm an Exhaustion gap setup.

1. Enter a "short" trade below the low of the gap bar at $435.
2. Place a "stop" order above the high of the gap bar $451.
3. Enter a target near the previous "swing low" prior to the exhaustion gap at $400.

Trading Breakaway Gap

Trading Breakaway Gap

The example above illustrates a Breakaway gap setup from the Sepracor's (SEPR) daily chart. Breakaway gaps develop from consolidation zones and are not filled for a long time. SEPR traded in a consolidation zone after an extended rally from December to January, 2006. In late January 2006, a Breakaway gap was created as SEPR expanded its trading range to downside from $60 to $57.75.

1. Enter a "short" trade below the low of the gap bar at $56.
2. Place a "stop" order above the high of the gap range at $60.
3. Place a target near the major swing low prior to the rally at $50.

13.2. Dead Cat Bounce

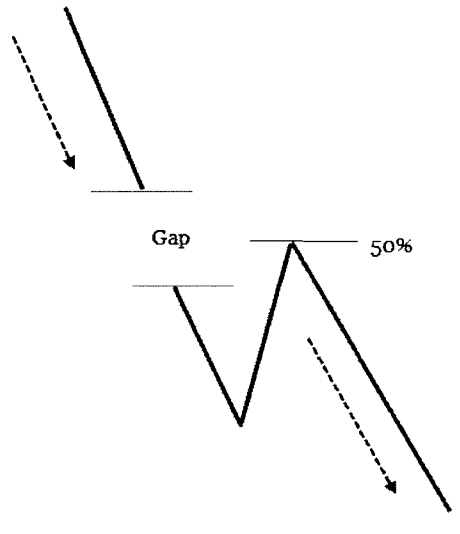
Dead Cat Bounce

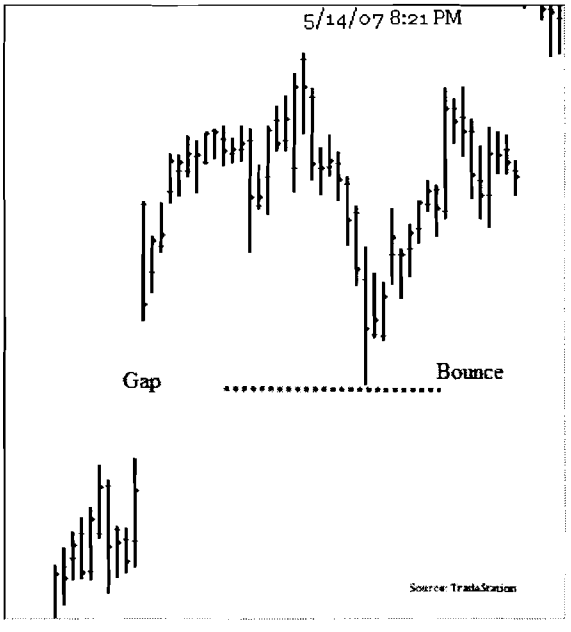
The "Dead Cat Bounce" pattern is an event driven pattern that occurs due to some sudden, major event or news related events such as a corporate earnings report, merger, takeover, partnership, resignations/appointment and scandal; Federal Drug Administration (FDA) approval and Securities Exchange Commission (SEC) inquiries in a company. From the regular trading price pattern, price usually drops or rises at least 15% or more to indicate the seriousness and reaction to the event. As this condition emerges, traders enter a trade in the opposite direction of the event and trade a rise or drop about half of the event price change at some leisurely rate. This makes it a "Dead Cat Bounce Pattern". Once the news settles, the price reverses the bounce and trades in the original event driven direction. This pattern has bull and bearish setups. This pattern also has high failure rate as some of these gaps are never retraced or filled for very long time.

Trade: It may be easy to trade the pattern once the "Dead Cat Bounce" occurs rather than chasing the event driven price-action. The rise/drop must be at least 15% of price. Most bounces are about 50% to 62% of the drop against the event-day direction. For an event driven price-fall, enter a short trade at 50% to 62% gap level. Short below the previous bar's low. For an event-driven price-rise, enter a long trade at 50% to 62% gap level. Enter a long above the previous bar's high.

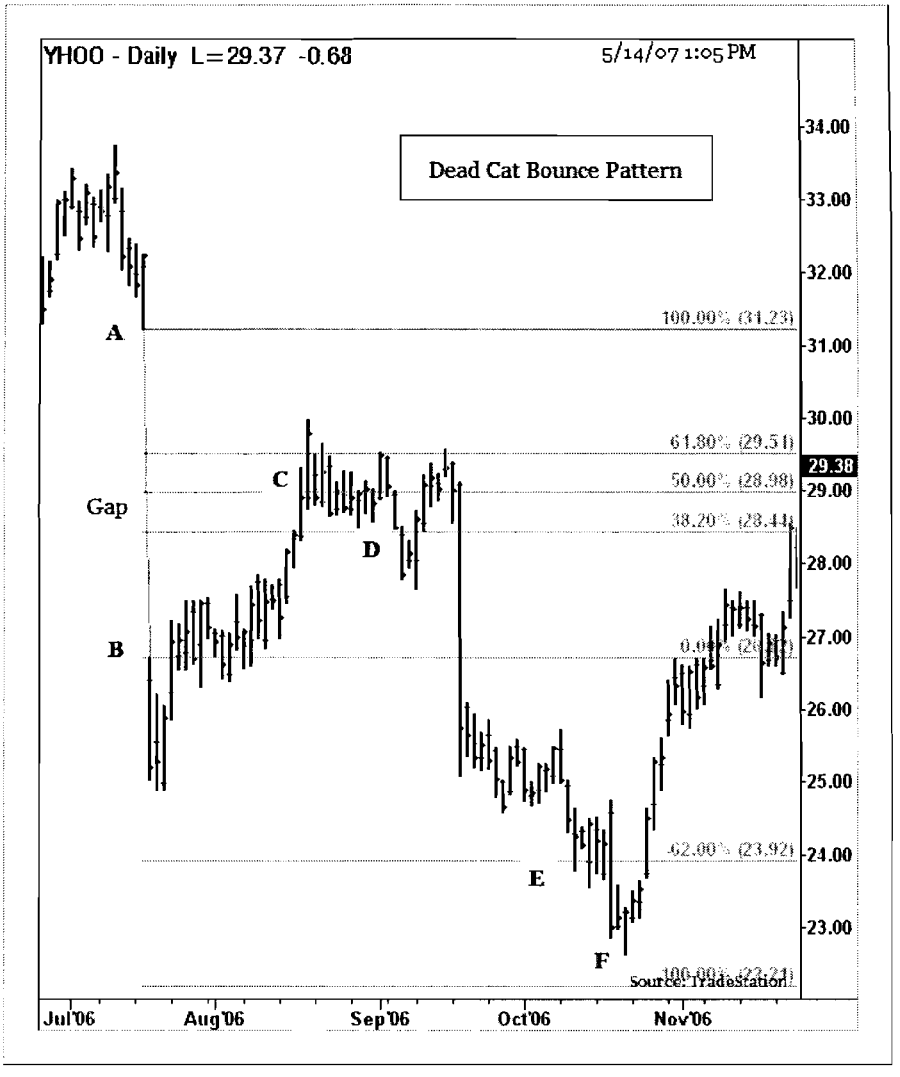
Stop:
Place a stop loss order at the event-days' gap levels. For a short trade, place a stop at the high of the event-day's gap down bar. For a long trade, place a stop below the low of the event day's gap up bar.

Target: The target is placed about 100% of the gap range from the trade entry.





Trading Dead Cat Bounce Pattern

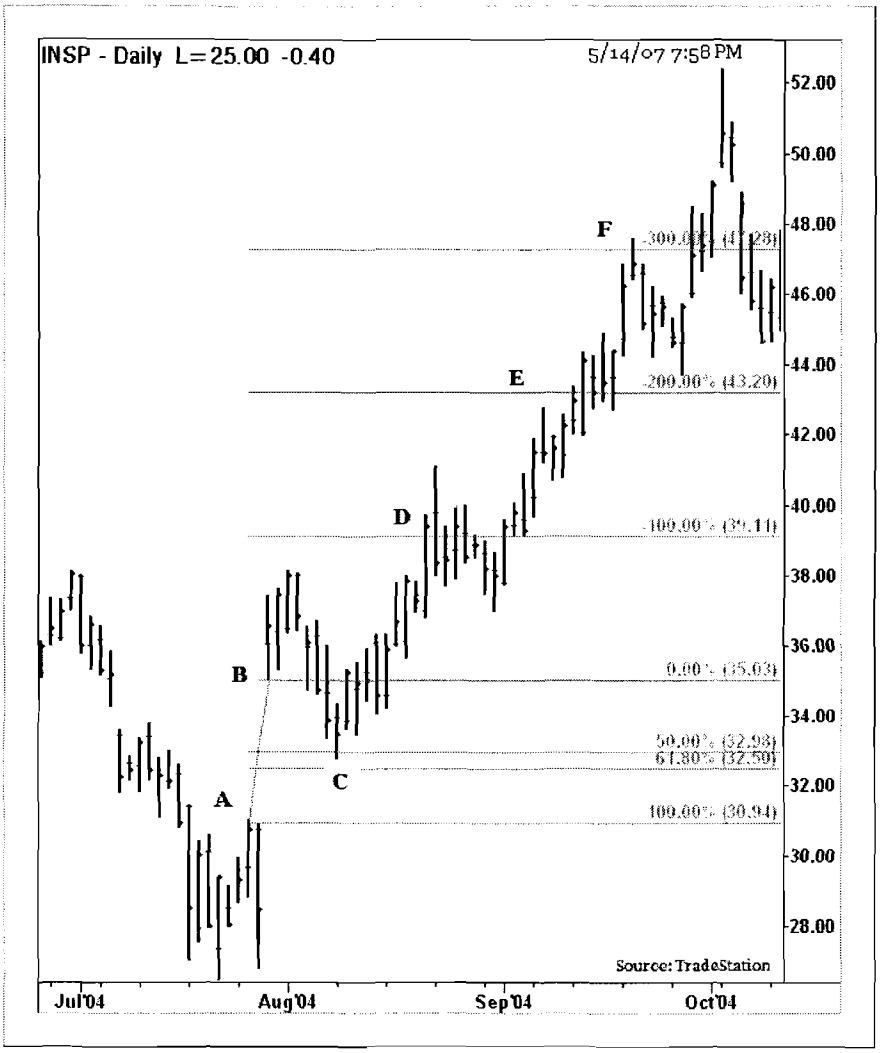


Trading Dead Cat Bounce Pattern

The example above shows a Dead Cat Bounce pattern from the Yahoo's daily chart. Yahoo announced its earnings in late July 2006 and as a result its stock dropped from $31 to $25. From mid July to August 2006, Yahoo attempted to close the gap as it bounced back from $25 to $30. The gap range generated by Yahoo's news was $4. In September 2006, Yahoo gave an opportunity to "short" at 50% level (at $29).

1. Enter a "short" trade below the previous bar's low at 50% level of gap (at D:$28.50).
2. Place a "stop" order above the top of the gap at A (at $31.25).
3. Place a "target" at 100% of the gap range from the trade entry (at $24).

Trading Dead Cat Bounce Pattern



Trading Dead Cat Bounce (Upside) Pattern

The example above illustrates an upside Dead Cat Bounce pattern from the Infospace's (INSP) daily chart. During August 2004, Infospace gap opened from $30 to $35. After a few sessions, Infospace retraced its rally into the gap. The gap range was $5. Infospace retraced about 50% of its gap range and presented a "long" trade opportunity.

1. Enter a "long" trade above the high of the previous bar at C (at $34).
2. Place a "stop" order at the lower gap (at $31).
3. Place a "target" at 100% of gap range from the entry level to D (at $39).

13.3. Island Reversal Pattern

Island Reversal Pattern

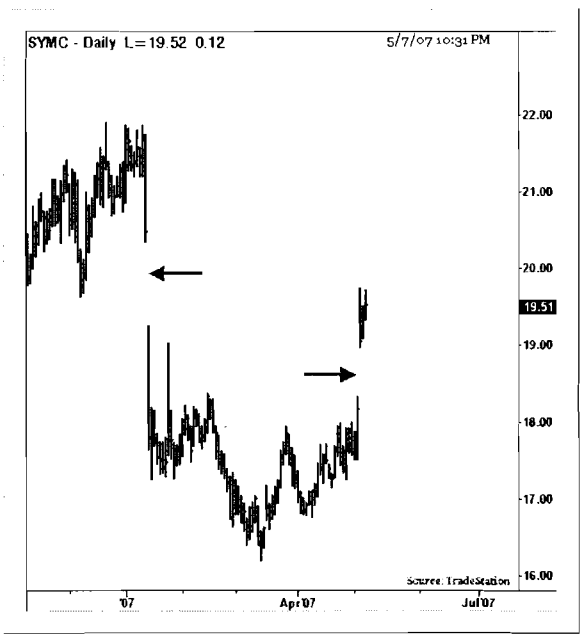
Island Reversals are part of price gap structures, and form when prices are isolated by gaps on both sides of the price rally or price decline. In an extended rally, price rallies above the prior sessions close and form an upside gap. After few sessions, a downside gap is formed to close below the prior sessions close. This isolation of price-range forms an Island Reversal setup, which usually signals much larger technical declines in bullish trends, or rallies in bearish trends.

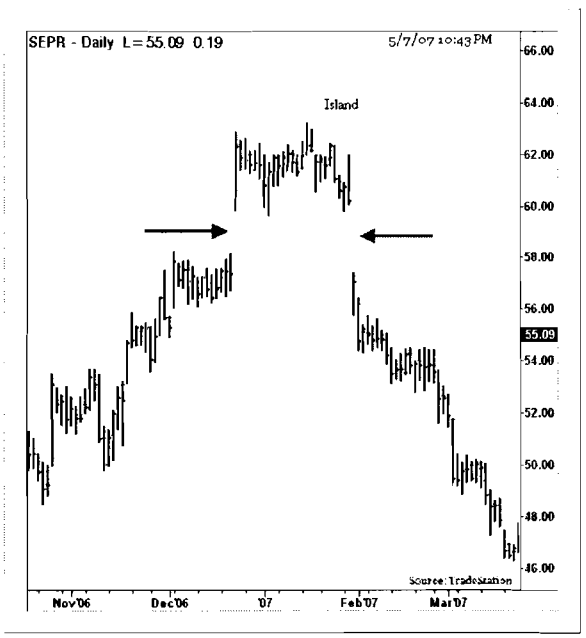
Most Island reversals are usually news driven events. Volume should be at higher levels on both sides of the gaps. It is very rare to see an Island Reversal pattern in the middle of a rally as they reverse the prior trends after the second gap.

Trade:
After a reversal, enter a "short" trade (for uptrend) below the low of the second down gap. Or, enter a "long" trade (in a down trend) above the high of the second gap up.

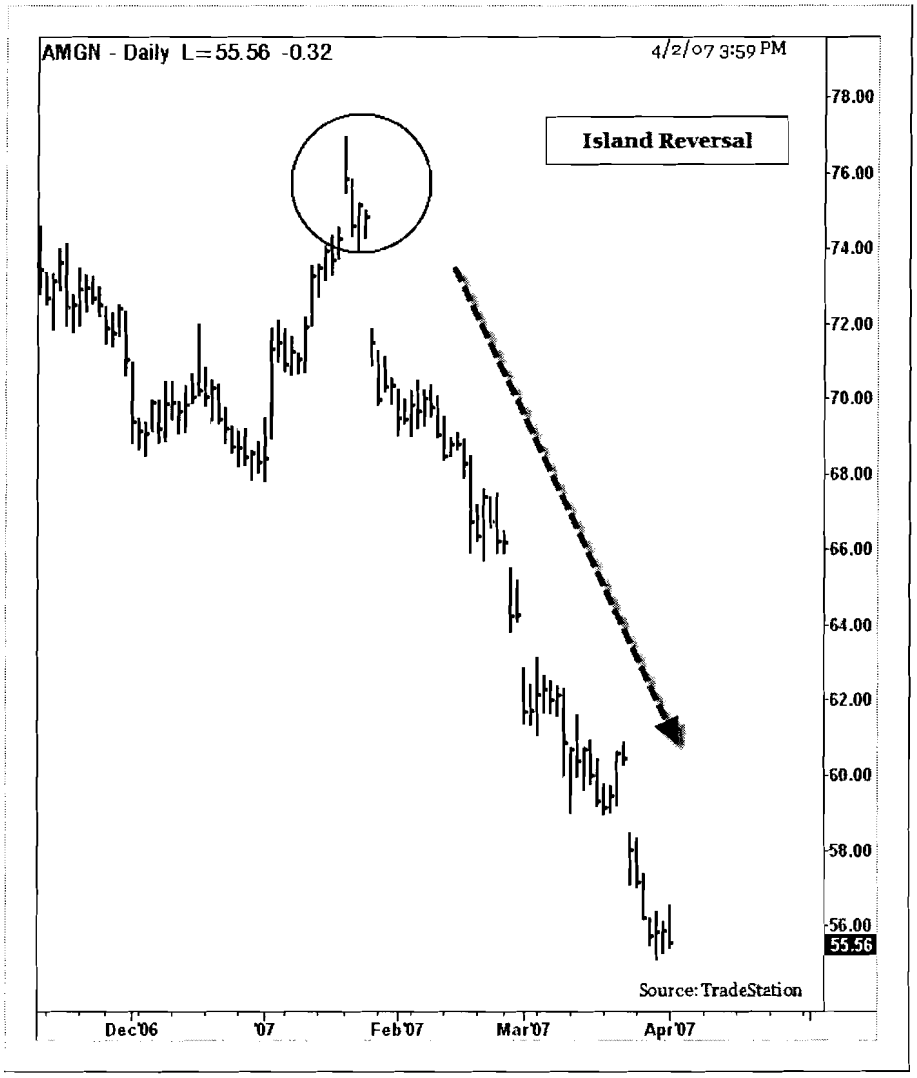
Stop:
Place a "stop" order if the market closes above the high of the "Island Reversal" pattern for shorts, or if it closes below the low of the Island Reversal pattern for longs.

Target: Island Reversals usually are very profitable as they signal a weakness in the current trend. Targets are placed near key event driven support or resistance levels.





Trading Island Reversal

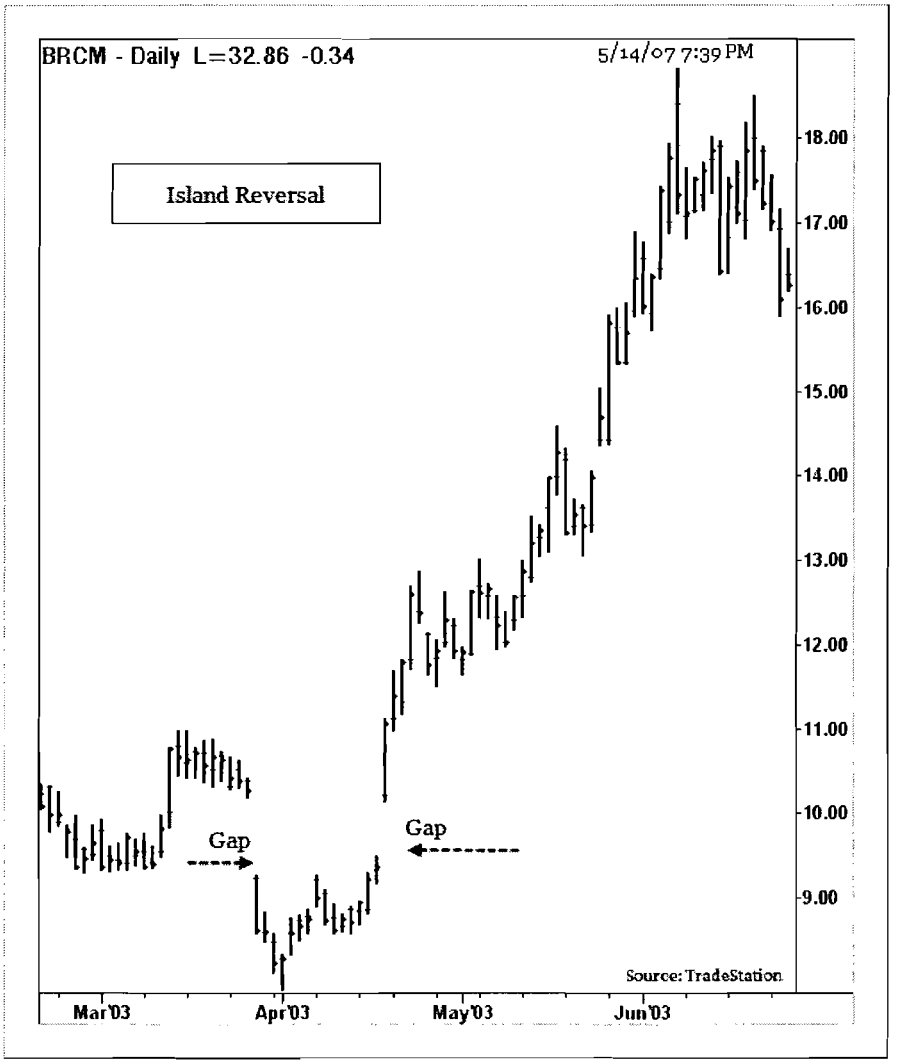


Trading Island Reversal Pattern

The chart above illustrates an Island Reversal pattern from Amgen's (AMGN) daily chart. During 2006, AMGN rallied to $76 and reversed to $56 by April of 2007. Late January 2007, AMGN showed its first upside gap and closed at $76. Within the next few sessions, AMGN closed the first gap and formed a downside gap to complete an "Island Reversal Pattern."

1. Enter a "short" trade one tick below the low of the second gap bar.
2. Place a "stop" order above the high of the bar prior to the gap.
3. Target a major "swing low" prior to the rally.

Trading Island Reversal



Trading Island Reversal

The example above illustrates an Island Reversal pattern in Broadcom (BRCM) daily chart. In March 2003, BRCM gapped down at $10 price level and traded for few bars lower. Late April 2003, BRCM reversed its downtrend and traded higher with gap closing above the previous downside gap. This scenario created an "Island Reversal" pattern and provided a "long" trade opportunity.

1. Enter a "long" trade above the Gap bar's high at $11.
2. Place a "stop" below the low of the Gap at $9.75
3. Place a "target" near a major "swing high" prior to the downside gap.

APPENDIX

Definitions

Breakdown: Current price surpassing a series of support prices and trading below it
Breakout: Current Price overcoming a series of resistance prices and trading above it
Congestion: Market in short-term and choppy price-range
Divergence: When two or more averages or indices fail to show confirming trends.
Drawdown: The reduction in account equity as a result of a trade or series of trades.
Entry: A new trade (Could be "Buy" or "Sell")
Exit: Closing the trade (Could be "Sell" or "Buy to Cover")
Extension: Price levels surpassing a previous Swing in the same direction as prior swing
Fib. : Abbreviation for Fibonacci
Fibonacci Ratio: he ratio between any two successive numbers in the Fibonacci sequence, known as phi (f).
Fractals: Depiction of mathematical models that may be applied to identify data patterns.
Gap: Current Price Opening away (Up or Down) from the previous bar's Close.
Impulse Wave: A wave or cycle of waves that carries the current trend further in the same direction.
Long: A Buy entry
Minute Chart: The time period for the chart is [n] minutes.
Neckline: A trendline drawn along the support or resistance points of various reversal and consolidation pattern (i.e., head and shoulder, double and triple top/bottom formations).
Opening Range: The range of prices that occur during the first five minutes to first hour of trading, depending on the preference of the individual analyst.
Overbought: Market prices that have risen too steeply and too fast.
Oversold: Market prices that have declined too steeply and too fast.
Pivot: A key price level where prices change or reverse its prior direction
Range: The distance between two price points (usually High and Low)
Resistance: Prices where selling pressure accumulates
Retracement: Price reversing from an upside advance or a downside decline (within a swing).
Short: A Sell entry
Spike: A sharp rise in price in a single day or two; may be as great as 15-30%, indicating the time for an immediate sale.
Stop Loss: The risk management technique in which the trade is liquidated to halt any further decline in value.
Support: Prices where buying pressure accumulates
Swing: The distance between two key pivot points (continuous)
Target: A profit price level from a trade entry.
Tick: The minimum price movement in a stock or contract.
Trendline: A line drawn that connects either a series of highs or lows in a trend.

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